



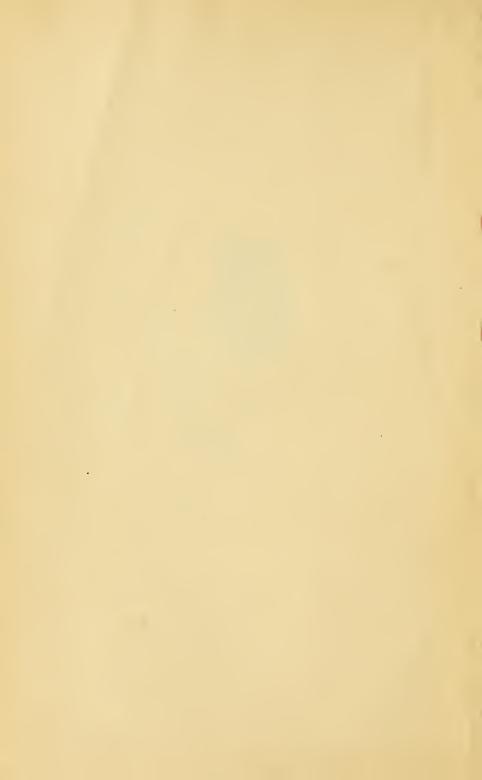
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THE

NATURAL & INDUSTRIAL

RESOURCES AND ADVANTAGES

OF

MARYLAND,

BEING

A COMPLETE DESCRIPTION

THE COUNTIES OF THE STATE

AND THE

CITY OF BALTIMORE,

Together with an Accurate Statement of their Soil, Climate, Antiquities. Raw and Manufactured Products, Agricultural and Horticultural Products, Textile Fabrics, Alimentary Products, Manufacturing Industries, Minerals and Ores, Mines and Mining, Native Woods, Means of Transportation, Price of Land, Cheap Living, Ready Markets, Excellent Homes, and the Material and Social Advantages and Unequaled opportunities Maryland possesses for those seeking Homes, and for Capitalists who wish to invest in Industries that are sure to Pay big Dividends.

By J. THOMAS SCHARF, A. M., LL. D.,

Commissioner of the Land Office of Maryland,

AUTHOR "HISTORY OF MARYLAND," &c., &c.

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MARYLAND'S

Resources and Advantages

FOR

TRADE AND POPULATION.

Maryland people ought to be the most contented in the world. We have the best markets and the most accessible markets in the world. Commerce on land and sea is easy and rapid, and rates are low. We have the most diversified resources, the best variety of industries, and a gloriousness of opportunity that cannot be excelled. There is no place in the world where people can live better for less and live longer, if they take care of themselves. We have an unsurpassed equipment of churches, of schools, and of the advantages of intelligent development. Better yet, we have a people whose courtesy and whose real moral and mental worth, united with a hospitality that is proverbial, make Maryland's society an achievement in civilization.

We have been fortunate in every way. Our progress has never been forced. No epidemic of land booms has damaged our real estate. No wholesale incursion of nondescript elements has injured our population. The best part of our State's history is that which is to take place. The happiest and solidest era of our growth is that which is now beginning. The turbulence and extremes of some of the other

States are emphasizing Maryland's blessedness, and directing to it the hopes and desires of thousands of good people who want homes in a place of plenty.

We read of the cyclones and blizzards and droughts and grasshopper plagues, and kindred misfortunes which carry death and disaster to sections of the west. We read of the floods and epidemics and vendettas which cause desolation and suffering in the south. We read of the cold and the barrenness which make New England farm lands almost valueless, and we read of visitations which inflict other parts of the country, and add to the large stock of human want and unhappiness. But in Maryland we have a minimum of misfortune, and if we are not happy, it is our own fault.

Crops in Maryland in 1891, have been uniformly good, prices have ruled high, manufacturing establishments have enjoyed exceptional advantages, and merchants have been enabled to carry on a large volume of trade with profitable returns. The assessed value of property in Maryland increased \$32,604,697 during the year, and it has gone up from \$459,000,000 to \$510,000,000 since 1880. With this increase of tangible property has been a corresponding advancement in the productiveness of the State, as is shown by estimates and returns made from various sources. The oyster industry is doing well since the opening of the season, and indications point to a large catch. It is now conceded that the culling law is having a good effect upon the beds, and it is likely that oyster dredging and tonging may be kept up vigorously until the end of the season in April, and the estimates of the best observers put the year's catch at 11,000,000 bushels.

Fishing for the year has been uniformly good. The catch of shad was enormous, and that of herring little behind it, while rock, bass, blue fish and other varieties afforded the fisherman a busy and profitable season.

In agriculture results have been eminently satisfactory. The peach crop was unprecedentedly large, and, owing to the excessive quantity of fruit and the exactions of the transportation companies, the farmers not only made nothing, but in many instances lost money on the best and most plentiful peach crop of recent years. Other fruits yielded well and brought fair prices; produce from the truck farms has moved rapidly to market, and there has met an active demand; products for the canning factory were above the average in quantity, with the single exception of tomatoes, which were a short crop. The corn crop for the year may be estimated at 18,511,000 bushels, or nearly 2,000,000 bushels more than last year. About 5,838,000 bushels of wheat were harvested, nearly 500,000 less than the product of 1890.

Foreign trade from the port of Baltimore has been unusually active. For 1891, the imports were \$18,127,664 in value, and exports were \$79,217,082 in value—an increase of over \$11,000,000 in both branches of the trade. Exports were largely corn and wheat, while imports were all the various commodities which go to make up the importation from foreign countries to America. In 1891, the number of foreign sail vessel entering the port of Baltimore were 214, and 620 steam vessels.

In the iron trade, Maryland is also acquiring an important place. Several manufacturing plants are turning out high-class machinery, ships for merchant trade as well as the United States Navy, while the great plant at Sparrow's Point has grown perceptibly in every department during the past year.

The coal trade in Western Maryland has more than held its own. Total shipments from the Cumberland coal region in 1891, were 4,537,954 tons; an increase of 531,863 over that shipped the year before, and an increase of 2,261,918 tons shipped in 1881, or an increase of more than 100 per cent. during the past ten years. It is worthy of men-

tion that some 60,000 tons of this amount came to tide-water over the Chesapeake and Ohio Canal.

Business at the Maryland quarries has been uniformly good throughout the year, Large contracts for building stone, blocks for bridges, and marble for various uses, have been placed in Maryland. The total product from the quarries is estimated at about 1,000,000 tons over that of 1890.

Maryland occupies an exceptional position among the States of the Union. Midway between the two great sections of the Atlantic Seaboard, the north and south, it partakes, to some extent, of the characteristics of each, so that immigrants from either section have no sense of strangeness or isolation in settling in any portion of the State. Maryland is not a small State. It is larger than any one of the New England States except Maine, it is five times the size of Delaware, considerably larger than New Jersey, and sizes up well with several of the Southern and Western States. The extreme length of the State from east to west is, 190 miles, and greatest breadth, about 120 miles. Its gross area is, 12,210 square miles. Its total land surface is, 9,860 square miles, and water surface, 2,350 square miles.

According to the census of 1890, the total population of the State was 1,042,390, an increase of 11.49 per cent., or 107,758 over the census of 1880. The last census also shows that we have in the State, 824,149 white persons, and 218,004 colored. Politically, Maryland has eight electoral votes, and is of equal importance as twenty-three other States, having an equal or greater number of electoral votes, while only twenty-one States have a larger representation.

In point of wealth and population, also, Maryland is by no means last or least. According to the census of 1890, the assessed value of real and personal estate was \$510,003,-077, and the amount of tax levied was \$905,255.50, or $17\frac{3}{4}$ cents on each \$100.00; $10\frac{1}{2}$ cents of which was appropriated for the support of the public schools of the State.

The education statistics of the State, show that we have 2,236 schools, 3,967 teachers, 154,418 white pupils, 34,796 colored pupils, or a total of 189,214 pupils in the State. The county schools number 2,089, with 2,723 teachers, 95,548 white pupils, 27,908 colored pupils, or a total of 123,456 pupils in the State.

The Census Bureau for 1891, shows that the county indebtedness for the whole State was, in 1880, \$1,377,325.00, and in 1890 this debt had been reduced to \$893,776. In 1880 the per capita indebtedness was \$1.47, but in 1890, this was reduced to 86 cents, or nearly one half, which was one of the largest reductions of total and per capita indebtedness made by any State in the Union, during the last decade.

DEBT OF MARYLAND ON OCTOBER 1, 1891.

DEDI OI MINUTENID ON OUTOBER	Σ,	1001.	
6 per cents	\$	500,000	00
5 per cents		206,356	28
3.65 per cents	3	3,000,000	00
3 per cents	7	,015,286	24
Total funded debt	\$10	,721,642	52
Offset—			
Productive investments\$3,126,470 00 Sinking fund investments in			
cash	6	,845,595	64
Net debt	. \$3	,876,046	88

The \$500,000, six per cents, in the above statement are the Treasury relief bonds of 1878, which were in the sinking fund on October 1st, 1891, cancelled, and which have since been destroyed. On the 6th of February, 1892, the financial officers of the State also destroyed \$1,242,300 of the 3 per cent. bonds held by the State in the sinking fund.

Maryland State taxes are levied only for public schools and to pay interest on certain funded debt, and to create a sinking fund for the same. The taxes were reduced in 1888 from $18\frac{3}{4}$ to $17\frac{3}{4}$ cents on the \$100.

TAXES IN MARYLAND.

Assessed Value of Property of the State.

	Assessed Value of	Amount of Levy for
Counties and Baltimore City.	Property for State	1891, at 17% cents
	Levy in 1891.	on each \$100.00.
Allegany	\$16,082,934	\$ 28,547 20
Anne Arundel	10,725,314	19,037 43
Baltimore City	276,408,052	490,624 29
Baltimore County	39,650,644	70,379 99
Calvert	2,037,800	3,617 09
Caroline	4,381,469	7,777 10
Carroll	15,885,655	28,197 05
Cecil	13,389,101	23,765 65
Charles	3,322,016	5,896 57
Dorchester	6,183,618	10,975 91
Frederick	23,139,041	41,071 80
Garrett	4,124,187	7,320 43
Harford	12,137,015	21,543 20
Howard	7,436,312	13,199 45
Kent	7,759,640	13,773 41
Montgomery	9,951,605	17,664 08
Prince George's	9,005,217	15,984 26
Queen Anne's	7,230,844	12,834 74 5,026 66
St. Mary's	2,831,924 $4,088,342$	7,256 81
Somerset	8,634,056	15,325 43
Falbot	17,055,413	30.273 35
Washington	4,065,605	7,216 44
Wicomico Worcester	4,477,273	7,947 16
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Totals.	\$510,003,077	\$905,255 50

RECAPITULATION.

Amounts.

Amount of levy for public school tax, at 10½c. on each \$100	.\$535,503 25	
Amount of levy for defence redemption tax, at 51c. on each \$100	280,501 70	
Amount of levy for treasury relief tax, at $1\frac{1}{2}$ c. on each \$100	. 76,500 47	
Amount of levy for exchange loan of 1886 tax, at 4c. on each \$100	. 12,750 03	

Total.....\$905,255 50

The climate of Maryland is mild and free from prolonged extremes of heat and cold, the soil is naturally kind and fertile, and most of it easily tilled and adapted to a great variety of products, and in almost every county there is a considerable body of comparatively unimproved or exhausted lands which can be purchased at very low figures, and if properly cultivated would soon yield handsome returns. The great need of Maryland is a larger population in the agricultural districts. Ever since the war rural labor in this State has been drifting towards the towns and cities, with the result that the farmer has been compelled to till his land with a smaller number of hands, and these less reliable and industrious than in former years. In many of the tidewater counties, where the negro population was larger than in other portions of the State, the abolition of slavery east upon the community a large body of unemployed laborers, who have since either led an uncertain, precarious existence in their cabins in the woods and clearing, many of them working only when it was absolutely necessary, or when it suited their humor, or have flocked in search of easier, more remunerative work, or merely for diversion and excitement, to the already overcrowded cities. The result is, that in most of these counties, labor has become demoralized, and it is no longer possible for the average farmer to till properly considerable bodies of land. tendency, therefore, is to break up large tracts into smaller holdings and to dispose of these at reasonable figures to thrifty immigrants, who will be enabled to work them properly. This plan has been pursued with marked success in some portions of the State, notably on the Eastern Shore, where the old-fashioned plantations are being rapidly divided into small farms capable of being tilled in many cases by the new owner and his family, with, perhaps, the aid occasionally of hired help. It is this class of immigrants which intelligent Maryland farmers are most anxious to attract, for it is well understood that their efforts to improve their

newly acquired properties not only contribute to the general prosperity of the community, but enhance the money value of contiguous property. Such settlers, whatever section they may come from, are warmly welcomed in every portion of the State, and in every county will be sure to find their neighbors kind and hospitable. The advantages which an emigrant from the more thickly populated States of the North will find in Maryland over the Western States and Territories, are a mild climate, exemption from "blizzards," droughts and extremes of heat or cold, a naturally fertile soil, with lands in some portions of the State as cheap as in many Western localities, and all the comforts of a settled well-or ered community, with the conveniences of churches, stores and schools, and easy proximity to the national capital and the great markets of Baltimore, Philadelphia and New York.

CHARACTERISTICS OF THE COUNTIES.

DESCRIPTION OF THE SOIL, THE PEOPLE AND THE PRODUCTS
—UNDEVELOPED RICHES—CHEAP LANDS AND COMFORT—
ABLE HOMES FOR THRIFTY FARMERS.

For convenience of reference the different counties are grouped into four sections, corresponding to the four geographical districts of Central Maryland, Western Maryland, the Eastern Shore and Southern Maryland, by which terms the different portions of the State are usually designated. The first of the series treats of the central portion of the State. Care has been taken in making up the descriptions of the different counties to avoid exaggeration, and to give a truthful picture of the actual condition of affairs. No attempt has been made to "boom" the State or any particular locality, but the effort has been to furnish reliable information for persons who are considering the advisability of settling in Maryland, and who wish to know in advance what they may expect in this or that portion of the State.

There is always room for disappointment on the part of those who purchase lands without first carefully inspecting them, but there is probably a smaller risk to be incurred in Maryland than in most other States, especially the Far West, for the reason that there is comparatively little land in this State which is not capable of improvement, and what might be regarded as very poor land for some kinds of crops, would probably be found to be very productive of others. Lands in Maryland vary greatly in value, as they do everywhere else, but the proportion of absolutely untillable land is small, and there is a great deal of land lying idle and unimproved or exhausted by overcultivation which, in the hands of a thrifty farmer, could soon be made to blossom like the rose.

Maryland offers many inducements to immigrants. mildness of the climate, the natural fertility of the soil, the variety of products grown here, including the choicest fruits and vegetables, the abundance of fish and oysters in the Chesapeake and tributaries, and the diversified character of the scenery-ascending gradually from the level of the plains of the Eastern Shore through the intermediate stages of fine rolling country on the western side of the bay, to the beautiful uplands of Baltimore, Carroll and Frederick counties, and beyond these to the mountains and smiling valleys of Western Maryland—combine to make Maryland one of the most attractive States in the country. The State's resources present in great variety elements of prosperity which, if fully utilized, would support comfortably a much larger population. The ovster trade of the Chesapeake would alone be a mine of wealth if properly worked, and, as it is, provides profitable employment to thousands. The vast peach orchards of the Eastern Shore, and in Southern Maryland, and on the Blue Ridge Mountains in Western Maryland, have contributed large sums to the resources not only of the farmers, but of persons engaged in canning, and the coal fields of Western Maryland maintain a large army of miners. Marble and stone quarries, iron furnaces, copper mines, woolen and cotton factories, paper mills, oyster, fruit and vegetable canneries, silica mines, are in successful operation in different parts of the State, and mechanical industries are steadily multiplying.

The mineral resources of Maryland, as shown by the census of 1890, are very considerable, and now that facilities for transportation are largely increased, the exploitation and developement of this source of wealth awaits only a wider extension of the knowledge of its existence and the return of a more hopeful spirit of business enterprise. The minerals and mineral substances of industrial importance within the limits of the State, may be divided into two classes: (1) those which are at present mined, and are thus having their value and quantity subjected to the most practical of tests, and (2) those ores, minerals and mineral substances of industrial importance and known occurrence which are not at present mined. To the former class belong the copper ores -purple copper, vitreous copper, (sulphide,) copper pyrites, malachite and black copper-found in Carroll, Frederick, Baltimore and Harford counties; the iron ores-chrome, hematite and limonite-found in Cecil, Montgomery, Baltimore, Harford, Howard, Allegany, Frederick, Carroll, Washington, Prince George's, Anne Arundel, Worcester, Somerset and Caroline counties; porcelain clay, found in Cecil, Anna Arundel, Harford and elsewhere; coal, of which it is hardly necessary to say more than that from 1842 to the end of 1890, as much as 60,000,000 tons had been conveyed from the Cumberland region to market; fire clay, in Allegany and Cecil counties; flagging stone in Frederick; granite, in Cecil, Howard and Anne Arundel counties; hydraulic lime-stone, in Allegany and Washington counties; mar ble, in several varieties, in Frederick, Baltimore and Carroll counties; marls, (green sand,) in Kent, Cecil and Prince George's counties; and shell marls at many places on the Eastern Shore, on the Choptank river in Talbot, and in Prince George's, Charles, St. Mary's and Calvert on the Western Shore; sandstone, extensively quarried in Mont-

gomery and in Fredrick counties; serpentine, in Cecil, Baltimore and Harford counties; roofing slate, in Frederick and Harford counties; carbonate of zinc, in Carroll, and zinc blende, in Baltimore and Carroll counties. The foregoing minerals were being worked at the time the census report on the minerals of the United States was written, some of them on an extended scale. Of the minerals placed in the second class-such as occur, but so far as known are not at present mined--Cecil produces asbestus, lignite, French chalk, soapstone and emerald nickel; Carroll, silicate of zinc, cobalt ore, silicate of copper, gold, cobalt pyrites, magnetic iron ore; Baltimore, emery, asbestus, gelena, gold, black lead, molybdenite, magnetic iron ore; Frederick, native copper, galena; Montgomery, gold, lignite, manganese ore, black oxide of manganese, French chalk, soapstone; Allegany, clay, ironstone, blackband ore; Anne Arundel, pyrites, soapstone, tripoli, (a large deposit from 5 to 30 feet thick;) Prince George's, lignite, pyrites; St. Mary's, gypsum. Calvert shares with Anna Arundel, the large deposit of tripoli mentioned above. This second list doubtless contains a number of minerals that demand only the application of some capital and mining experience to be made the basis of flourishing industries, and both lists promise favorably for Maryland's future mining interests.

Maryland is peculiarly rich in having the best quality of white building marble in the world. There is a popular error extant to the effect that Vermont, Massachussets and the East have a monopoly of the marble building trade. This error was somewhat shaken when Baltimore was required to furnish 405 of the 555 feet in the Washington monument at the national capital, and again when Messrs. George Mann & Co. captured the contract for building the spires of St. Patrick's Cathedral in New York, the most imposing edifice of the kind in the country.

The Beaver Dam Marble quarries at Cockeysville, Baltimore county, are something wonderful, and give the

beholder an impression that the surrounding country for miles must rest upon one solid, glistening mass of white limestone. They seem to be absolutely inexhaustible, and when it is considered that they have been worked for the past fifty years they are practically so. During this period stone has been produced for 108 monolithic columns, weighing 25 tons each, for the Capitol at Washington, and numerous large blocks for the Capitol, the Washington monument and other public and private buildings, beside the Cathedral towers. In some Baltimore buildings erected 45 years ago, the perfect color and preservation of the stone shows its durability for the purpose for which it was used.

The quarries are now sixty feet in depth and are worked over a surface of five acres. The larger of the two excavations has the appearance of a huge amphitheatre. Any size of stone required can be furnished in a single piece. In fact this was the only place in the country that could produce the 28-foot monoliths for the Capitol, after all the rest of the quarries had been unsuccessfully tried. The stone here was in many instances gotten out in such large blocks that one of them was split into three pieces of the size needed. Quite recently an immense block was quarried, which contained 9,700 cubic feet, weighing 180 pounds to the foot, or 1.746,000 pounds in all. There is no machinery in the world capable of moving such a mass of stone. The proprietors confidently assert their capability to make a monolith of the dimensions of the celebrated Cleopatra's Needle. They suggest that if any enterprising American has an ambition to duplicate the needle in white native stone, which will have the advantage of durability not possessed by the original, the Beaver Dam can produce it. peculiarity of the stone is its "life," which permits handling without breakage, and advantage over what is known as "dead" stone, not possessed by the product of Eastern quarries.

Besides white marble, Maryland is rich in possessing over a hundred other varieties and colors of marble. The Verde Antique or Green Serpentine marble quarried in Harford county, has no equal in the United States, for ornamental and polished work.

The granite industry is a very large one in Maryland. According to the census of 1890, the output for that year amounted to \$14,464,005, an increase of 179 per cent. in ten years. There are twenty-two firms in the State doing an extensive business quarrying granite, who employ about 1,000 men.

The Maryland granite is technically known by three names—Biotite granite, Biotite gneiss and Gabbo. The first is quarried extensively in Baltimore, Howard and Montgomery counties; the second in Cecil and Baltimore counties, and the last only in Baltimore county. All kinds are regarded as first-rate in quality, and all are sought after by builders in Baltimore and elsewhere, while a fair share is eonsumed annually in ornamental building and in supplying the endless demand for tombstones, fencing and curbing.

The State has a great advantage over most other portions of the country in the temperate and salubrious character of its climate. While the heat and cold are sometimes intense, the extremes of weather are never of long duration, and there is probably a greater average of comfortable days in every year than in any other State. Relief from the "hot spells" in summer can be secured by a trip to the seashore or mountain, both of which are readily accessible from any portion of the State. There is an abundance of good water in all the counties. In the lowland counties bordering on the Chesapeake and its tributaries, malarious diseases pervail to some extent, but not more so than in other sections of the country where similar conditions exist. Closer tillage and better drainage have resulted, in some of the tidewater counties, in marked improvement in this respect. With the exception of malarial complaints, which prevail at certain seasons almost everywhere, the entire State is

singularly exempt from diseases which are prevalent in other localities; while the freedom from destructive blizzards and extremes of heat or cold, to which other sections are exposed, greatly increases the comfort and safety of farm life in Maryland.

The great Chesapeake Bay, which forms a vast natural basin into which flow the waters of many noble rivers, divides the State into two sections—the Eastern and Western Shores—of which the latter is much the greater. both in area and variety of resources. The Eastern Shore, however, from its advantages of location, having gnick rail communication with Baltimore, Philadelphia and New York, and unsurpassed facilities of transportation by water to Baltimore, and the adaptability of its soil to a great variety of products, has made rapid strides during the past two decades. Curiously enough, the oldest section of the State, Southern Maryland, which was the seat of the first settlement of Lord Baltimore, is the one which is the most backward in progress, owing mainly to the lack of transportation facilities. Lands are cheaper in Southern Maryland than elsewhere in the State, and this section probably offers greater inducements to immigrants of small means than any other portion of the State. The lands in most cases are exhausted by neglect, poor tillage, and lack of proper manuring, but are naturally fertile, and with a little care could doubtless be made to yield handsome returns. In all parts of Maryland, however, even in the most thickly settled portions, there is considerable unimproved or poorly tilled land, which can be purchased at reasonable figures, and the immigrant would secure, in addition to the advantages of a mild and salubrious climate and proximity to market, the conveniences of ample school and church facilities within easy reach, and all those comforts of civilization which have to be created with infinite pains and labor on the unpeopled prairies of the West.

POPULATION OF MARYLAND.

The State 1890. 1880. No. Per Cent. 1890. 1880.		Population.	TION.	INCREASE	EASE.	WHITE	TE.	COLORED	RED.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1890.	1880.	No.	Per Cent.	1890.	1880.	1890.	1880.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	The State	1,042,390	934,943	107,447	11.49	824,149	724,693	218,004	210,236
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7	90 010		İ				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Allegany	1/0,14	90,012						
43,449 382,339 102,126 30.73 366,920 278,584 67,326 9,860 10,538 *67.8 *6.43 -4,757 4,842 -5,103 13,903 13,766 1,384 4.47 30,190 28,706 3,895 25,851 25,851 1,384 *4,47 30,190 28,706 3,978 25,851 15,101 18,548 *1,257 *1,64 21,850 22,644 3,978 24,843 23,110 17,733 7.50 16,035 14,634 8,215 24,843 23,110 17,733 7.50 14,634 8,215 49,512 50,482 *9.51 42,605 14,634 8,215 14,213 12,175 2,038 16,74 14,030 12,063 16,646 58,993 28,042 951 3,241 10,416 10,416 10,416 10,416 10,400 11,246 58,993 28,042 951 *13,4 11,4832 13,965	Anne Arundel	24,034	026,02		4				
4.5.103 *6.43 *4,757 4,842 5,103 13.903 13,766 137 0.10 10,008 3,600 3,895 13.903 13,766 137 0.10 10,008 29,600 3,895 25,851 27,108 *1,257 *4,64 21,850 22,644 3,778 24,843 23,110 1,733 7.50 16,035 14,634 8,215 24,843 23,110 1,733 7.50 16,035 14,634 8,215 49,512 50,482 *970 *1,92 42,962 6,46 28,993 28,042 951 16,036 17,433 8,215 16,269 16,140 12,06 11,741 4,173 17,471 17,605 *10,416 10,406 7,055 26,080 26,451 *134 *1,173 11,245 *15,06 26,080 26,451 *1,14 *1,94 *1,450 12,063 11,246 26,080 26,451	Baltimore	12,309	289 313				•		
13,903 13,766 137 10,008 9,600 3,895 25,851 27,108 *1,257 *4,64 21,850 22,644 3,978 15,191 18,548 *3,357 *18,10 22,644 3,978 24,843 23,110 17,57 49,512 24,845 24,865 42,962 6,646 49,512 50,482 *970 *1,92 42,865 42,962 6,646 14,213 12,175 2,038 16,74 14,030 12,063 183 14,213 12,175 2,038 16,74 14,030 12,063 14,73 16,269 28,042 9,80 12,096 11,741 4,173 17,471 17,605 *1,49 14,832 13,965 11,245 17,815 24,759 24,26 9,80 17,472 15,608 9,710 18,819 16,934 *1,118 *1,816 12,067 6,645 19,736 19,065 671 3,52 12,148 14,502 12,974 7,587 19,736 19,065 671 3,52 12,148 12,657 2,580 10,737 10,530 10,914 10,631 12,813 12,522 6,854 10,737 10,530 12,914 12,522 6,854 10,737 10,530 12,914 12,522 6,854 10,737 10,530 12,914 12,813 12,522 6,854 10,737 10,530 12,914 12,813 12,522 6,854 10,737 10,530 12,812 12,812 12,812 12,812 10,738 12,139 12,813 12,522 6,854 10,737 10,530 12,813 12,522 6,854 10,737 10,530 12,813 12,522 6,854 10,738 10,747 10,747 10,747 10,747 10,747 10,747 10,747	Baltimore city	0880						7	
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x1, 257 **1, 257 **4, 64 21, 850 22, 644 3,978 15,101 18,548 *3,357 **1, 10 6,957 7,700 8,215 24,843 23,110 **1,733 7,50 42,865 42,865 8,215 49,512 50,482 **993 12,175 42,865 42,962 6,646 28,993 28,042 951 3.39 22,416 21,885 6,577 28,993 28,042 951 3.89 22,416 21,885 6,577 16,269 16,140 **129 0.80 12,096 11,741 4,173 17,471 17,605 **134 **0,416 10,416 10,400 7,055 18,461 19,257 **371 **14,60 10,400 7,055 18,461 19,257 **11,15 **1,472 15,067 6,645 18,461 19,257 **1,115 **1,48 14,502 12,974 9,653 19,736 19,065 671	Caroline	89.376							
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23,702 2,901 1,914 10,62 14,600 12,943 5,330 19,930 12,522 6,854 1,05 12,893 12,522 6,854	Talbot	13,700							
	Washington	101,00				_			
	Wicomico	19,350							

* Decrease,

CITIES AND TOWNS.

THE POPULATION OF THE THIRTY-THREE CITIES, TOWNS AND VILLAGES OF MARYLAND HAVING 1,000 OR MORE INHABITANTS IN THE ORDER OF THEIR RANK, IS AS FOLLOWS:

CITIES, TOWNS	Counties.	Popui	ATION.	INCREASE.		
AND VILLAGES.	,	1890.	1880.	Number.	Per Ct.	
Frederick	Allegany	434,439 12,729 10,118 8,193	332,313 10,693 6,627 8,659	102,126 2,036 3,491 #466	30.73 19.04 52.68 *5.38	
Annapolis Cambridge Frostburg Havre de Grace Easton		7,604 4,192 3,804 3,244 2,939	2,816 3,005	962 1,930 3,804 428 *66	14.48 85.32 15.20 *2.20	
Salisbury	Wicomico	2,905 2,903 2,632 2,507 2,318	2,581 2,507 2,359 1,752	324 396 273 2,507 566	12.55 15.80 11.57	
Catonsville Laurel Port Deposit Pocomoke City	Baltimore	2,115 1,984 1,908 1,866	1,712 1,206 1,950 1,425	403 778 *42 441	23.54 64.51 *2.15 30.95	
Westernport Hyattsville Ellicott City	Montgomery	1,568 1,565 1,526 1,509 1,488	688 986 1,468 288 1,784	880 579 58 1,221 *296	127.91 58.72 3.95 423.96 *16.59	
St. Michael's Centreville Williamsport		1,483 1,416 1,329 1,309 1,277	1,276 1,175 1,196 1,503	207 1,416 154 113 *226	16.22 13.11 9.45 *15.04	
Sharpsburg Chesapeake City Oxford,	Cecil. Washington, Cecil. Talbot. Garrett.	1,249 1,163 1,155 1,135 1,046	988 1,260 1,402 689 910	261 *97 *247 446 136	26.42 *7.70 *17.62 64.73 14.95	

^{*} Decrease.

Population of Maryland by Congressional Districts.

First District	Fourth Dist ict187,844
Second District182,886	
	Sixth District
First District	Fourth District—Continued.
Caroline County13,903	Ward 15—Precinct 1. 1,223
Dorchester County24,843	Precinct 2 1,721
Kent County17,471	Precinct 3 1,816
Queen Anne's County. 18,461	Precinct 4 1,560
Somerset County24,155	Precinct 5 1,675
Talbot County19,736	Precinct 8 1,489
Wicomico County19,930	Precinct 9 1,622
Worcester County19,747	Ward 16—Precinct 2. 1,040
Second District	Precinct 3 1,808
Carroll County32,556 .	Precinct 4 1,509
Cecil County25,851	Precinct 5 1,620
Harford County 28,993	Precinct 6 1,764
Baltimore County—	Precinct 7 1,322
District 2 4,561	Precinct 8 1,662
District 3 5,473	Precinct 9 1,697
District 4 4,479	Ward 18—Precinct 2. 1,687
District 5 2,381	Precinct 3 1,869
District 6 2,285	Precinct 4 5,254
District 7 3,312	Precinct 5 2,237
District 8 5,957	Precinct 6 2,011
District 9 7,977	Precinct 7 3,741
District 10 2,838	Precinct 8 5,327
District 11 4,977	Precinct 9 2,651
District 1217,279	Ward 1924,484
Baltimore City—	Ward 20 23,168
Ward 2223,338	Fifth District 166,345
Ward21-Precinct 1. 2,008	Anne Arundel County, 33,914
Precinct 2 1,984	Calvert County 9,860
Precinct 3 1,961	Charles County15,191
Precinct 4 2,321	Howard County16,269
Precinct 5 910	Prince George's Co26,080
Precinct 6 1,445	St. Mary's County15,819
Third District	Balto. Co.—District 1 7,217
Baltimore City—	District 13 4,173
Ward 122,162	Balto City—Ward 15—
Ward 216,843	Precinct 6 1,991
Ward 315,762	Precinct 7 1,694
Ward 415,777	Ward 16—Precinct 1, 1,828
Ward 515,809	Ward 17 25,209
Ward 626,322	Ward 18—Precinct 1. 1,675
Ward 725,083	Ward 21—Precinct 7. 1,397
Ward 824,688	Precinct 8 2,267
Ward 912,360	Precinct 9 1,761
Fourth District	Sixth District
Baltimore City—	Allegany County41,571
Ward 1015,760	Frederick County49,512
Ward 11 15,700	Garrett County14,213
Ward 1228,341	Montgomery County 27,185
Ward 1314,601	Washington County39,782
Ward 1417,485	

COUNTY TAX RATES IN MARYLAND.

Counties.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
Allegany	.841	.81‡	.811	.821	.814	.931	.871
Anne Arundel	.88	1.07	1.00	1.14	.89	1.09	.81
Baltimore City	1.60	1.70	1.60	1.90	1.90	1.85	1.55
Baltimore County	.60	67	.60	.61	.36	.63	.54
Calvert	$.90\frac{10}{12}$	1.21 5	.841	$.86\frac{1}{20}$.878	.92	.91
Caroline	.811	.914	.911	.971	.921	.921	.921
Carroll	.50	.50	.50	.50	.50	.50	.50
Cecil	.75	.80	.80	1.00	.671	.70	.63
Charles	1.00	1.04	.87	,93	.92	.93	.88
Dorchester	$.86\frac{1}{4}$.861	.864	.924	.851	.921	$.92\frac{1}{4}$
Frederick	.65	.65	.58	.65	.70	.62	.62
Garrett	$1.12\frac{1}{2}$	1.03	1.17	1.10	1.08	.98	.98
Harford	.80	1.00	.74	.82	.75	.87	.83
Howard	.61	.65	.61	.62	.60	.76	.70
Kent	.88	.90	.86	.91	.88	.88	.82
Montgomery	.861	.891	.891	.924	.921	.911	.901
Prince George's	.80	.74	.78	.90	.95	1.00	.80
Queen Anne's	1.001	.981	.90	.87	.91	.92	.93
Somerset	$1.02^{\frac{2}{4}}$.791	.861	.981	.92	1.20	.95
St. Mary's	1.07	,98	.97	1.00	.97	.93	.90
Talbot	.65	.73	.70	.73	.73	.83	.83
Washington	.87	.87	.74	.75	.86	.78	.78
Wicomico	.814	.811	.831	.817	.971	.77	.754
Worcester	.681	.72	.77	.90	.80	.90	.78

Areas of the Counties of Maryland in Square Miles.

0.000
9,860
Harford422
Howard250
Kent315
Montgomery
Prince George's 480
Queen Anne's
St. Mary's
Somerset365
Talbot285
Washington
Wicomico369
Worcester

CENTRAL MARYLAND.

BALTIMORE, HARFORD AND HOWARD COUNTIES AND THEIR RESOURCES.

Central Maryland, or that section of the State which is in more immediate proximity to the City of Baltimore, comprises the counties of Baltimore, Harford and Howard. This section is largely devoted to market-gardening and the raising of vegetables for the markets of Baltimore City and Washington, and for the canneries, of which there are a large number in Harford county. It is for the most part quite thickly settled, and in the front rank of flourishing agricultural communities. There are also a number of manufacturing industries in Baltimore and Howard counties.

BALTIMORE COUNTY.

No county in Maryland has greater opportunities for development than Baltimore county, and no county is more indifferent to her opportunities. Blessed by nature with an abundance of water and wood, with soils easily cultivated and capable of yielding ample harvests of all the cereals, vegetables and all the best fruits of temperate climates, it rests only with the inhabitants to advance their own interests by adjusting themselves to the surrounding physical conditions. Two of the great areas of rain precipitation being included within its limits, together with the mildness of the climate, give it almost unsurpassed advantages for sustaining a healthy and flourishing population. It has an area of 622 square miles, and a population of 72,909, divided as follows: white, 62,540; colored, 10,369. The soft, micaceous soils of the rolling uplands are covered by farms richly cultivated, and yield abundant crops of wheat and corn. On the ridges are forests of oak, hickory, chestnut and maple. Numerous streams run through this section. The waters are clear, and do good service in furnishing power to flour mills, which stand hid away in unsuspected dells or hollows.

VALLEYS OF BALTIMORE COUNTY.

Valleys of surpassing loveliness may be seen in various parts of the county. The chief of these are Green Spring, Worthington, Dulany's, Long Green and the Great Central Basin.

Dulany's Valley extends from the ridge north of Lake Roland to that three miles beyond the Gunpowder river, or a distance of ten miles. It varies in width, being not over a mile across in any part. It connects with other short valleys on its northwest side, and thus appears immensely expanded at several points. In this valley is the large estate of Hampton and Glen Ellen. It is richly supplied with almost inexhaustible beds of the strongest limestone, yielding the best quality of burnt lime.

Long Green Valley is a more abrupt depression between the chain of high hills, and narrower than any of the other large valleys. The Harford road passes through the whole length of the southeastern depression, and connects with roads running into other sections of the region, making every part of it readily accessible. On every hand picturesque farm-houses, with their groups of whitewashed outhouses, associated with fine orchards of peach, cherry and apple trees, greet the eye, contrasting finely with the dark soil of the hills, and testifying to the neatness and thrift of the people. The whole region is picturesque, attractive, well watered and most inviting as a place of summer residence. It only needs a modern railroad to make it speedily accessible in order to draw a large population.

The Green Spring Valley is a beautiful tract of country, running nearly west and east, and opening out at the basin

of Lake Roland. It extends from near Owings' Mills to the latter, a distance of about seven miles, and is about two miles in its greatest breadth. Its name was derived from the numerous springs which bubble up in two small lakes near the head of its depression, situated in the midst of a tract remarkable for its rich verdure. The ridge on its north side rises by gradual stages from the basin adjoining the Northern Central Railroad, and rolls in lower, broad waves toward the head of the valley. On the south side a chain of hills rises in majestic beauty above the horizon. This ridge starts from near its opening with a high back, about three-quarters of a mile long, and is continued by six or seven others of less length, all crowned with tall trees, and flowing westward like the folds of a huge sea-serpent, until lost amid the domes at the head of the valley. Fine, large farms range on both sides and along the flanks of the hills, and many of the choice country seats of wealthy citizens of Baltimore lie half concealed behind the groves of trees which shut in the landscape. The soil varies from clay to loam, is well watered and yields abundant crops of cereals and fruits. The valley is in the midst of a rich grazing tract, containing numerous dairy farms, which produce vast quantities of the richest milk and cream, and prove the importance of this district to Baltimore.

Crossing the broad rise of Chestnut Ridge, upon which Reisterstown-is situated, and proceeding a short distance towards the east, Worthington Valley stretches out in a broad, oval depression, having a general northeast by southwest trend, of nearly five miles in width, and more in length. It is surrounded on all sides but one by moderately high, almost abruptly sloping hills, crowned with deep forests of every variety of green. The depression becomes gradually deeper as Western Run is approached, while several of its tributaries take rise along the flanks of the ridge on the southeast and west sides of the basin. A short swell of low limestone hills pushes into the valley from near

the middle of the southeast side, and contributes an element of variety to the view in that direction. The valley is underlaid by a sheet of white limestone of extraordinary purity and excellence, in which excavations have been carried to a depth of more than sixty feet, without reaching to the underlying rocks. Nature has endowed this lovely valley with everything needed for the comfort of man. A deep, fertile soil spreads out all around; vegetable humus is washed down from the hills by every freshet; all the cereals grow in rich profusion; fruits of all the usual kinds are at home here; brooks cut their way through the meadows at frequent intervals, and two kinds of water for drinking run from the hills or swell up in the limestone wells. The woods are full of varieties of flowering shrubs and plants, and the ferns luxuriate in dense thickets upon every moist hillside or hollow, and form brakes in the damp corners of the meadows. This peaceful valley rests in the midst of a scene of quiet beauty, affording pleasant prospects in all directions. It only needs a system of good roads to render it highly attrative to residents of the city who seek a place for health and repose.

IN THE LIMESTONE BASIN.

The Great Central Basin is the broad, open depression adjoining Cockeysville. It is a wide stretch of country, sloping inward from the rolling hills on the northwest and south, but itself rolling gently away towards the southeast and south, and connecting with smaller valleys in those directions. It is bounded by Chestnut Ridge on the left and Ashland Ridge on the right. It is a great limestone basin, scooped out of the archaean rocks, overlaid by ironore clays in depressions, and with quartz distributed throughout in their beds. It is both the center of the marble and agricultural interests. The Beaver Dam and other quarries yield inexhaustible supplies of choice white marble of various kinds, while the Texas belt supplies

immense quantities of valuable limestone. In and around the basin large farms of rich soil in a high state of cultivation are numerous, and on the northwest side is situated the celebrated Hayfields, the prize stock farm of the county. All the cereals and fruits grow here in abundance, and the grazing farms supply the city with milk and butter. Situated on the Northern Central Railroad, within three-quarters of an hour's ride from Baltimore, renders it quickly accessible, and it is rapidly filling up with an active and intelligent population.

On the rolling hillsides and in the river valleys, many of the finest and most valuable rural estates and farms of Maryland are spread out, whose history runs back into the colonial period. Along the line of the Northern Central Railroad there are numerous busy towns. Distilleries, cotton duck mills, paper mills, quarries and various other industries are in operation.

CLIMATE AND PRODUCTS.

The waters of the Chesapeake Bay wash the shores of the county from the Patapsco river northeast to the Gunpowder, and between these two rivers are numerous streams. The climate is mild, with an average temperature of about 56° Fahrenheit. The upper section of the county is remarkable for its salubrity of atmosphere and the healthfulness of its people. Besides the agricultural staples, great quantities of garden fruit and vegetables are grown for the city markets, and the yield of grapes and berries is a sources of much profit. The mineral deposits are valuable, and are extensively worked. Besides the varieties of fine building stone may be meutioned limestone, iron ore, pipe clay, chrome, manganese, ochre, an abundance of brick clay, beds of marl on the river and bay shores, and veins of copper. The shores of the Chesapeake and its estuaries on the southern and southeastern sides of the county, are largely used for

gunning and fishing grounds, where as good sport may be found as anywhere in the land. Excellent roads lead from the city down to these shores, which are owned or leased by clubs or individual sportsmen. The common school system of the county is in a flourishing condition, offering to all pupils the benefits of free education. There are institutions of learning in the county that have a world-wide reputation.

EDUCATIONAL INSTITUTIONS.

In the midst of a smiling landscape on Charles Street avenue, about half way between Baltimore and Towson, the county seat, are the spacious grounds and lofty trees surrounding an imposing structure—the Convent of Notre Dame—attached to which is the famous Notre Dame of Maryland, a collegiate institute for young ladies. It is approached by a broad avenue. From the broad marble hall, up the wide stairs to drawing-rooms, study halls, musicrooms, chapel and dormitory, the twin goddesses of health and hygiene have fulfilled all the requirements. In an upper story, where the windows command a magnificent view of the Chesapeake Bay, are a dozen rooms, each one handsomely furnished. They are occupied by parlor boarders, and are presided over in each department by a sister. Besides the regular curriculum, the scholars are given ample scope for proper physical development in calisthenics, boating, tennis, &c.

Situated upon a high ridge just east of Catonsville, commanding a view of an immense expanse of land and water, is Mount de Sales—the Academy of the Visitation—a school for young ladies, under the charge of the Sisters of the Visitation, which is known all over North America as one of the foremost educational institutions on this continent. Its walls and towers are visible from every point of the compass for miles.

The McDonogh Institute, near McDonogh Station, on the Western Maryland Railroad, presents a beautiful front of two hundred and thirty-six feet.

Woodstock College, under the direction of the Society of Jesus-a general house of study, embracing a thorough course of philosophy and theology-stands on a magnificent eminence over the Patapsco, an hour's ride from Baltimore on the Baltimore and Ohio Railroad. Over two hundred acres of land are attached to the college property. The buildings occupy a fine plateau surrounded by ornamental grounds, and contain two hundred rooms. The library occupies half of one of the wings, and contains over twenty thousand volumes of rare and valuable books, embracing complete sets of the Greek and Latin Fathers, and original parchment manuscripts of the Scriptures in the Hebrew language. The chapel is a gem of beauty, finished in the Roman style, with frescoes and pilasters. The altar rail is from a church in San Domingo, and is over three hundred years old. The college is one of the most important institutions in America for the training of young men for the priesthood.

Mount St. Agnes Academy, at Mount Washington, in charge of the Sisters of Mercy, is a stately edifice of marble and brick, crowning a lofty hill, and is devoted to the education of young ladies.

Hannah More Academy, near Reisterstown, is another institution of learning.

Amid the quiet loneliness of Lutherville, on the Northern Central Railroad, stands the Lutherville Female Seminary, an educational institution of a high order, under the direction of the Lutheran Church. The seminary has, to some extent, assisted in promoting the growth of Lutherville, and another agent is the eligibility of the place for suburban residences and summer boarding-houses.

Mount St. Joseph's College, on the Frederick road, is an excellent school for boys. The tone of society in the beautiful valleys of the county, as well as in other sections, is highly refined.

CHARITABLE AND BENEVOLENT INSTITUTIONS.

Among the institutions worthy of mention are: The Spring Grove Asylum for the Insane, situated near Catonsville, a State institution; St. Agnes' Hospital, on Maiden Choice road; Hebrew Orphan Asylum, at Calverton Heights; St. Mary's Female Orphan Asylum, Roland avenue; Mount Hope Retreat, on the Western Maryland Railroad, an institution for the care of the insane. This place is surrounded by a fine estate of more than three hundred acres, and is one of the most complete and magnificent edifices of the kind either in this country or in Europe. The Sheppard Asylum, near the county seat, is another magnificent institution for the care of the insane.

The county is not excelled by any other in the State in the numbers and architectural beauty of its churches. The most obscure hamlet has its houses of worship. The more ambitious towns and villages show numerous edifices, consecrated to the service of God, and the elegance of many bears witness to the taste and prosperity of the people. The taxes are very low, the rate for the present year being but fifty-four cents.

NATURAL PRODUCTS.

Among the important industries in the county are the Beaver Dam quarries, near Cockeysville. These quarries furnished the huge monolithic columns for the Capitol at Washington. The marble for the magnificent City Hall at Baltimore came from these quarries, as also has the material for scores of fine public buildings and thousands of stately private residences. In the vicinity of these quarries the Northern Central Railroad passes for nearly a mile between walls and over a bed of the best alum limestone. In this section a very extensive business in lime for building and fertilizing is done.

Iron ore in the vicinity of Ashland is plentiful and of excellent quality, and furnaces of an iron company have given employment to many persons in the neighborhood. The most extensive paper mills in the State are located in Baltimore county.

No city in the country has finer suburbs than those on the thoroughfares of the county leading to the City of Baltimore. Numerous merchants of Baltimore City have their country residences on the Frederick road and in its vicinity. Catonsville is situated on this road six miles from Baltimore, and is connected with the city by a steam and horse railroad. Located upon an elevated plateau, five hundred and fifty feet above tidewater, surrounded by noble forests and highly cultivated estates, and drained by gentle slopes towards the Patapsco river south and west, and Gwynn's Falls north and east, it is one of the most healthful and beautiful villages in the State. It enjoys so great a reputation for salubrity that it has been chosen as the site of four educational institutions. The scenery is charming, embracing views of the city and Chesapeake Bay as far south as Annapolis, the dome of the State House being visible in a clear atmosphere. It has a population of 2,115, an increase of 23.54 per cent. over the census of 1880.

MANUFACTURING INDUSTRIES.

Wetheredville is a thriving village situated on Gwynn's Falls, five miles from the city. It is surrounded by bold

and romantic hill scenery, through which the stream rushes with impetuous force. Cotton and woollen factories give employment to many of the inhabitants.

Granite, fourteen miles from Baltimore, is noted for its great granite quarries, from which a first class quality of building stone is obtained in inexhaustible quantity.

Alberton is the seat of a heavy cotton manufacturing business. It extends on both sides of the Patapsco, eighteen miles from Baltimore, on the Baltimore and Ohio Railroad.

MAGNIFICENT RESIDENCES.

Along the Liberty road, and a portion of the Western Maryland Railroad, is a region taken up with elegant residences of wealthy citizens, and farther out is a succession of grand old homesteads and farms, whose broad and well-tilled acres yield luxuriantly of the fruits of the soil. A generous hospitality is exercised by the proprietors of these splendid estates.

Mount Washington, situated on the Northern Central Railroad, five miles from Baltimore, and the vicinity, are in much demand for summer resorts. The surroundings are hilly and romantic. A flourishing cotton duck factory gives employment to several hundred persons. A mile north of the village is a rich vein of copper. The copper mines there will, it is said, be put in operation in the near future.

Nine miles distant from Baltimore, on the Northern Central Railroad, Lutherville, an exceedingly handsome town, is located. It occupies the side and crest of a hill overlooking the valley of Jones' Falls in one direction and Dulany's Valley in another, while the country about is dotted with small villages and the country residences of city merchants. To the south of Lutherville is Ruxton, a magnificent place for a summer resort. Cockeysville is a flourishing village

north of Lutherville. In this section are superb stock and grazing farms.

That portion of the county immediately north of the city is covered with residences of more or less elegance, and a little farther out each side of the roads presents a succession of suburban villages and cottages, and their grounds, many of which have exhausted the resources of the architect, the landscape gardener and the decorator. Year after year this splendid territory is being still more elaborately beautified. It is impossible to compute the number of millions of dollars of capital that are invested in it. The region has a steadily increasing elevation from tidewater to the hills of the Gunpowder river, and that stream and Jones' Falls, together with dozens of brooks fed from abundant springs, flow down from the elevations, topped with tasteful and imposing suburban mansions. This section is the home of rural ease, plenty and elegance, and contains the time-honored homesteads of the Ridgelys, of Hampton, the Gilmors, the Hillens, the Hoffmans, the Jenifers, and other old families.

THE COUNTY SEAT.

Towson is the county-seat, and is seven miles north of the city, on the York Turnpike and Baltimore and Lehigh Railroad. It has a flourishing population of about two thousand. Here are located the court-house, the county offices, the county jail, several hotels, churches and schools, and during terms of court and in times of political contests, farmers' gatherings, county meetings, &c.,*the town has a very lively appearance; while it is at all times the center of much activity. There are many handsome cottages and other residences in the town, and the taste of the people has led to the cultivation of attractive gardens around their homes, so that in the proper season they are beautifully set off with flowers and twining

plants. A considerable amount of capital is held in and around Towson, and the buildings show that a refined judgment has directed large expenditures.

DOWN "THE NECK."

An important section of the county lies to the east and northeast of Baltimore city. It is known as the Twelfth district. The lands stretching towards the numerous estuaries of the Chesapeake are mainly devoted to truck raising. which has proved much more profitable than the cultivation of the cereals. The country is low, and is pierced in every direction by excellent roads, such as the Trappe road, the Old Trappe road, North Point road and Eastern avenue extended. Many of the roads are laid with oyster shells, which, pulverizing under the wheels of vehicles and hoofs of horses, form a bed of unsurpassed smoothness and solidity. What is more particularly known as the Shell road leads from the city to Back river, through charming scenery at the heads of the inlets to the bay. Public resorts are numerous along the road and on the shores, and the drive is a very popular one with the people of the city. The gunning and fishing grounds in this district are, perhaps, among sportsmen, the most famous in the United States. They are what are known as the "Necks," formed by the Patapsco, Middle, Back and Gunpowder rivers, where the streams make up for miles into the country, leaving tongues of land between. The water-fronts all through here and on the islands of the upper Chesapeake are owned or leased by yacht clubs, gunning clubs, fishing clubs, or private individuals with a fancy for sport, and many of these associations have erected cozy houses for the accommodation of their members. The late fall and the winter months are the season for duck shooting, and owing to the enforcement of excellent game laws, the supply of birds continues large. The ducks are attracted to these feeding-grounds by the abundance of valisneria, or wild celery, which grows on the flats near the shores.

CANTON.

That section of the district contiguous to the eastern limits of the city is the home of a large population and the scene of important industries, especially in Canton and Highlandtown. The property of the Canton Company extends along the Patapsco river all the way down to Colegate's Creek on the river front, and thence across the neck to Back river. Upon it are located the immense grain transfer elevator of the Northern Central Railway Company, the marine terminus and wharves of the Union Railway Company, several large petroleum refineries, with their wharves and railroad connections, two whiskey distilleries. iron furnaces, chemical works and many smaller industries. The river front from Lazaretto Point to North Point, where the Patapsco empties into the Chesapeake Bay, forms the northern side of the entrance to the harbor of Baltimore, and from the low bluffs fifty miles of water are spread before the view, bearing on its bosom the commerce of a great seaport. Fort McHenry and the city frame the picture on the north, on the west are the shores of Anne Arundel: down to the northward and eastward the protrusion of North Point melts away into the vast expanse of the Chesapeake, while the foreground is filled up with the gray walls and bastions of Fort Carroll and the innumerable fleet of all classes of vessels that are constantly arriving and departing.

Chesterwood, the grounds of the Free Excursion Society of Baltimore, is upon Bear Creek, five miles from the city. This noble charity provides during the summer free excursions for the poor of the city.

The price of land in the upper, or agricultural, portions of the county is very low. Land in the Green Spring Valley can be bought for from \$100 to \$250 per acre. In Catonsville it runs from \$500 to \$1,200 per acre, and the same along the York turnpike, Reisterstown pike, Roland

avenue and Harford road. Along the Philadelphia road land sells at from \$40 to \$100 per acre. Some of the most valuable and fashionable property near the city is located between the York and Falls turnpikes. Among the magnificent estates in this neighborhood is "Guilford," the property of the A. S. Abell estate.

STEELTON.

The great works of the Pennsylvania Steel Company, one of the most important industries in the State, are located at Steelton, a village of vigorous growth in the Twelfth district. It was begun in 1887, and has increased to such vast proportions that it will undoubtedly become one of the great industrial and commercial enterprises ever begun in the United States. The parent company, which was started at Steelton, Pa., in 1865, proved such a success that the plan of forming another plant near tidewater was deemed a wise and proper course. The city of Baltimore and its immediate vicinity seemed to show greater advantages in the particular line desired than any other place along the coast or accessible to tidewater. Fred. W. Wood, the superintendent of the company, was sent to Baltimore during the winter of 1885, and made a careful inspection of all the properties along both sides of the Patapsco river. He finally fixed upon Sparrows' Point as the most desirable location for the extension, and after carefully investigating, the management subsequently fixed upon Mr. Wood's choice. Negotiations for securing the property were successfully conducted, and the deeds for Sparrows' Point, Holly Grove and the adjacent lands were turned over to the Pennsylvania Steel Company in March, 1887. Surveys of the property were made at once, the plans for the steel plant and town were made in the offices of the works at Steelton. A large force of engineers was employed to make surveys for a railroad line to connect this city with Sparrows' Point, in order to facilitate the transport of manufactured iron and steel over the railroad lines which centered here. Work was begun in earnest in April, 1887, under the direction of Rufus K. Wood, and now Steelton is the largest steel works along the Alantic coast. It is connected with the city of Baltimore by the Northern Central, Philadelphia, Wilmington and Baltimore and Pennsylvania Railroad at Orangeville, and by the Baltimore and Ohio Railroad at Colegate's Creek. The enterprising company have erected on their property several immense furnaces for the manufacture of Bessemer steel, an immense stock house, a vast number of boiler and engine houses, rolling mills, pattern shops, machine shops, pumphouses, ship yard, docks, piers, &c. The company has also laid out and built upon a systematic plan a model town for the employees and their families. The company owns 1,000 acres, and a portion of them has been platted in blocks, and streets of 60 feet width, crossing each other at right angles, which, with 10-foot sidewalks, leaves a space of 80 feet between the houses on opposite sides. A thorough system of underground drainage has been made, and water is conducted in iron pipes to all the dwellings. The town and the works are lighted by electricity. The residences of the officers and the cottages of the workmen are built of frame on pretty modern architectural designs. Several hundred houses have been finished, and many more are in course of construction. The population is about 2,500, and the payrolls now number about 2,000 people.

Catholic, Methodist Episcopal and Protestant, and Episcopal churches have been built on ground donated by the company. There is also proper provision made for the education of the young in the town.

The growth of Steelton has been such that it is believed in ten years the company will have 25,000 people residing on their property. At the same time it is estimated the place will have eight piers, with steamships unloading thousands of tons of ore daily. The specialties manufactured are to be boiler plate, ships' plates and railroad iron. Sparrow Point will produce everything entering into the manufacture of ships at low cost. There will be plenty of steel for ships and coast defences. The building of steel ships and ironclads, with their machinery and equipments, will give ample employment to the Sparrow Point works, and it is believed will advance Baltimore in the line of shipbuilding. It is proposed to use foreign ores largely at the Sparrow Point furnaces. They will come from Cuba, Spain, Island of Elba and many Mediterranean localities. The outlook is most encouraging, and the community is to be congratulated in the establishment of such an industry in the immediate locality of Baltimore.

HARFORD COUNTY.

Harford county, situated near the headwaters of the Chesapeake Bay, with the Pennsylvania line on the north, the Susquehanna River and Chesapeake Bay on the east, Chesapeake Bay on the south, and Baltimore county on the west, contains 422 square miles of territory, and according to the census of 1890, 28,993 inhabitants, divided as follows: white, 22,416; colored, 6,577. The population of the City of Havre de Grace, the largest place in the county, is 3,244, an increase of 428 since 1880, or more than fifteen per cent. The population of Belair is 1,416.

The soil varies from light loam to heavy clay, and is easily improved and very productive. The land is for the most part arable and undulating, and highly improved. For farming purposes the price varies from ten to a hundred dollars per acre. The chief products are corn, wheat, oats, hay, tomatoes and small fruits and vegetables. Stockraising and grazing and the making and sale of butter and milk are growing industries. Since the opening of the Maryland Central Railroad, a few years ago, from the Bal-

timore county to the State line—a distance of 25 miles—the development of the milk trade has been very rapid. Over this road are now shipped 1,500 gallons of milk daily. Most of the farmers are industrious and thrifty. As a result they have improved their stock of horses, cattle, sheep, and swine by crossing with the best strains of each, and now use labor-saving machinery of the most approved patterns.

INDUSTRIES AND PRODUCTS.

The canning industry is extensive and profitable. The number of packing houses now in operation is estimated at four hundred. Many of them begin with the early fruits and vegetables in the spring, and close only with the remnants of corn and tomatoes left by the early frosts. The entire pack of fruits and vegetables in a prosperous year aggregates near a million cases.

The manufacture of flour, fertilizers, feed and carriages is not extensive, but sufficient for the wants of the county, with a margin for export. There is a large paper factory on the Susquehanna River, near Darlington, that is highly remunerative. Other manufacturing enterprises are invited by the abundant water power of the Susquehanna River, Deer creek, the Little Gunpowder, Bynum's and Winter's run and other streams of pure water that traverse the county.

The estimated annual amount of the general mercantile business transacted in the larger towns gives to Abingdon, \$15,000; Aberdeen, \$75,000; Bel Air, \$500,000; Churchville, \$30,000; Darlington, \$35,000; Dublin, \$20,000; Fallston, \$80,000; Forest Hill, \$35,000; Havre de Grace, \$1,000,000; Jarrettsville, \$10,000; Level, \$20,000; Norrisville, \$10,000, 'and Perryman's, \$60,000. Other towns would swell the aggregate to two million dollars.

DUCK SHOOTING AT HAVRE DE GRACE.

There is no place in the country like the City of Havre de Grace, in Harford county, for duck shooting. All the

ducks found in the waters near Havre de Grace are better and bring higher prices than those from anywhere else-This fact is due to their feeding on wild celery in fresh water. The Susquehanna flats, below Havre de Grace, but nearly opposite the city, cover an area of about fifteen square miles, with an average depth of about four feet of water. There are vast beds of the tender, juicy wild celery on the bottom of the Susquehanna flats. Every high river brings down the necessary fertilizers from the rich lands above, which are caught by the tide and settle on this bottom. When winter sets in early in the far North, the ducks put in an appearance about the middle of October. The bluewinged teal are the first ducks to visit the flats, then come the bald-pate and black ducks, followed by the sprig-tails or gray ducks, as they are called by the native shooters. Later on the red and black-head ducks come in quantities, followed by the canvas-backs, which reach their greatest number about November 15.

The game laws passed by the Maryland Legislature are very strict, and have proven a great protection to the ducks. They now have a chance to settle on the flats, and get plump and in good condition before the shooting begins. The season, as regulated by law, now opens November 1 and ends March 31, and prohibits shooting at any other time except from shore. When the shooting is good carloads of ducks are shipped to New York, Philadelphia and other Eastern cities. Hundreds of dozens of the delicate game are also sent West and South, and large quantities are often shipped to Europe. It is claimed that more ducks are eaten in Baltimore than in any other city in the United States.

There are few counties that possess superior transportation facilities to those of Harford. Bush, Gunpowder and the Susquehanna Rivers and the Tide-water Canal are accessible to neary one-half of the inhabitants, and the Pennsylvania, Northern Central, Baltimore and Ohio, and Maryland Central Railroads accommodate the other half. The projected road from Bel Air to the Susquehanna River, when completed, will furnish all the facilities desired. During the last twenty years there has been a marked improvement in the farms and buildings, and the wealth and comforts of the inhabitants—attractions that catch the eye of strangers and cause many of them to remain in the county, which is regarded as one of the most progressive and prosperous in the State.

HOWARD COUNTY.

Howard, the most southern of the central Maryland counties, and next to Calvert, the smallest county in the State, is bounded on the north by Frederick, Carroll and Baltimore counties, on the east by Anne Arundel and Prince George's, on the south by Montgomery, and on the west by Frederick. The area is 250 square miles, and according to the census of 1890, the population was 16,269, divided as follows: white, 12,096; colored, 4,173.

Howard is one of the best adapted counties in the State for agricultural and manufacturing industries. The soil is mostly fertile and kind, easily cultivated and readily improved. Much of it is a loam, with clay sub-soil, and in a portion of the county there is an abundance of limestone land, that part of it known as "Limestone Valley" being particularly noted for its great natural beauty and fertility. In the southern section mica has been found, and in recent years some of the mines have been worked to advantage. The land is all valuable, and commands a ready sale at good prices, ranging in the improved portions and where the transportation facilities are good, from \$40 to \$100 per acre. Wheat, corn, hay and potatoes are chiefly the present products. In some parts of the county the land is susceptible of tobacco raising, especially in the northwestern

portion, where the attention of many of the farmers has been given to its cultivation for some time past, and as most of them are supplied with all the necessary buildings and appliances for curing, &c., a profitable return has been the result. The raising of fruits and vegetables is receiving considerable attention in some sections, and much of the once idle land is now being utilized for this purpose. In view of the easy transportation and small expense required to place them in our best markets, there is every reason to prophesy for them a leading position among the industries of this section. All along the Baltimore and Ohio Railroad, and bordering upon the Patapsco River, are many acres of land, which, owing to its natural condition and adaptability of its soil, could, according to the statements of experienced grape raisers, be converted into a succession of vineyards, which would yield a handsome profit. The county's healthful climate, excellent water-power advantages, and the natural productiveness of its soil, render it one of the most desirable and promising counties in the State for industrious, energetic immigrants. There is, perhaps, no county possessed of better transportation facilities than Howard. It is bounded for many miles both by the Main Stem and the Washington Branch of the Baltimore and Ohio Railroad, with stations every few miles along both lines, with, as a rule, good county roads leading thereto. The Baltimore and Frederick turnpike passes entirely through the county from east to west, and, together with the Ellicott City and Clarksville turnpike, affords to the residents of the interior sections an easy outlet to Baltimore and Ellicott City. The C. A. Gambrill Manufacturing Company's flour mill at Ellicott City offers to the farmers a ready market for their wheat, which would otherwise necessitate its being shipped by rail or an additional drive of ten miles to the Baltimore market. The county commissioners are liberal in their appropriations for roads and bridges, and, as a consequence, they are kept in good condition.

The people, too, are strong believers in good roads, and in addition to the two principal turnpikes already mentioned, private enterprise has built several short lines of pike in different sections of the county. The farmers are progressive in their agricultural methods, and every improvement in farming machinery is at once adopted. All the labor-saving implements which experience has proved to be valuable are in use, the best fertilizers are procured, and the system of farming which tends to the permanent improvement of the soil, is pursued. Much interest is taken in the raising of pure bred stock, and many farms are already noted for celebrated strains of both horses and cattle. Along the line of the railroad are many well-conducted dairy farms, the milk from which is daily shipped to the Baltimore market. Throughout Howard county are many thriving villages, all of which are well supplied with churches and schools. Being almost surrounded by the Patapsco and Patuxent Rivers, whose water power is peculiarly adapted for mills and factories, it has for its extent greater manufacturing facilities than almost any of its sister counties.

Besides a large number of minor mills on the different water courses in the interior of the county for the manufacture of flour, corn meal, &c., there is the well-known paper mill of John A. Dushane & Co., with over forty operatives and a capacity of five tons of paper per day; the extensive cotton mills at Alberton and Savage, each with a force of 400 hands, and owned respectively by James A. Gary & Co. and Wm. H. Baldwin, Jr.; the Guilford Cotton Mill, and the Electric Light Company's shops at Elkridge. There are many other points on the Patapsco that might be brought into profitable use by a little outside capital, combined with energetic effort on the part of the more enterprising citizen.

Howard's educational facilities are exceptionally good, there being, in addition to the well-conducted system of free public schools, in Ellicott City alone, three large private institutions with well-deserved reputation. A large volume of mercantile business is transacted in the different towns and villages of the county, that of Ellicott City alone being estimated at over \$1,000,000. The population of this thriving place is 1,488.

A new line of railroad has long been in contemplation to run through the western section of the county, for which a survey was made by the Baltimore, Cincinnati and Western Railway Company in 1881, but the enterprise has so far been a failure, and the products of a considerable acreage are still conveyed to market by horse and wagon.

A national bank has recently been established at Ellicott City, with which many of the leading citizens are connected, and which is looked upon as an indispensable auxiliary in promoting the various industrial interests of the community. Since its establishment new life seems to have sprung up in business of every kind, and its great advantage is now generally conceded.

WESTERN MARYLAND.

THE MINING REGION OF THE STATE—A FERTILE AGRICUL-TURAL SECTION.

Western Maryland presents a greater variety of resources than any other section of the State. Its surface is broken by mountain ranges, which divide it into charming valleys, with fine, undulating stretches of country at the base of the mountains, affording unsurpassed agricultural lands, besides extensive deposits in the mountains, of coal and iron. The bituminous coal of the George's Creek region is a vast source of wealth, and gives employment to many thousands of miners, whose labor has built up a number of thriving towns and vil-

lages. The counties of Western Maryland are Allegany, Carroll, Frederick, Garrett, Montgomery and Washington.

ALLEGANY COUNTY.

Allegany county is located in the extreme western portion of the State, just south of the Pennsylvania line, with Washington county, Maryland, on the east, Garrett county on the west, and the Potomac river, separating it from West Virginia, on the south. The population, according to the census of 1890, was 41,571, divided as follows: White, 40,096; colored, 1,470. Since 1880, the population of Allegany county has increased 3,559 or 9.36 per cent. Its area is 477 square miles.

The coal fields in the western portion of the county, and extending twenty miles in one direction and five in another, are the chief feature and source of wealth. There is a good proportion of farming and rich timber land, many of the farms being quite productive. The soil is sandy loam along the streams, and in the mountain regions limestone, slate and sand, mixed with loam. There is a large territory covered with forest, especially in the eastern portion. The prices of cleared land range from \$10 to \$50 per acre, but there is much undeveloped mountain land which can be bought as low as \$2 per acre. The chief products are corn, rye, oats, potatoes, with some buckwheat, hay, wool, butter, and a fair proportion of fruits. There is a considerable trade in lumber and tan bark. In recent years there has been much improvement in farming machinery. Some fine stock is raised, but not nearly to the extent possible, as much of the land is well adapted for grazing. The fruit cultivation could also be largely increased the eastern slope offering good chances for grape culture. If the large tracts of undeveloped timber land were divided up and sold, there would be a chance for industrious immigrants to start profitable farming. There has been some move in this direction of late. Much of this undeveloped land is owned by non-residents.

CUMBERLAND.

Cumberland, which is situated at the confluence of the north branch of the Potomac, with a considerable stream known as Wills Creek, is called the "Queen City." Like another Maryland town made famous in song, it is "Green-walled by the Hills," or, rather, mountains of the Allegany range. These great walls seem at first glance to cut off the eity from the world, but inquiry discovers the fact that few cities are so thoroughly equipped with transportation facilities as this, the county seat of Allegany county and the metropolis of Western Maryland. It is on the main line of the Baltimore and Ohio Road. The Pittsburg and Connellsville Railway joins it to Pittsburg. A branch of the Pennsylvania system connects it with that great highway at Huntington, Pa. The present terminus of the West Virginia Central and Pittsburg Railway is at Cumberland, but it has in contemplation the building of an extension to tidewater at Baltimore. The Cumberland and Pennsylvania Railway runs from it through the Cumberland coal region to Piedmont, W. Va. The George's Creek and Cumberland Railway taps the same coal field for its benefit, and other mines are made tributary to it by the Eckhart branch of the Cumberland and Pennsylvania Railway. The Chesapeake and Ohio Canal, which commences at Cumberland and terminates 184 miles east of this city, has been restored as a waterway. For local transportation, Cumberland has also great facilities, being on the line of the great national turnpike and other well-kept roads.

The population of Cumberland, according to the census of 1890, was 12,729, an increase of 2,036, or 19.04 per cent. since 1880. It is expected the population of Cumberland will be largely increased, when the Baltimore and Ohio people carry into effect a plan they have determined on and

CONCENTRATE THEIR REPAIR SHOPS

at that point. The arrangements have been made to remove

to Cumberland the shops of the Second, Third and Pittsburg divisions. This will add 1,000 mechanics and their families, say from 4,000 to 5,000 people to the population of the city.

Cumberland is situated in the heart of the greatest bituminous coal region in the world, dominates a section exhaustless in raw materials and as already shown possesses magnificent transportation facilities. The city has given its name to the coal obtained from this district, a coal whose excellence is undisputed in the mechanical world. It is a semi-bituminous carbon, almost wholly free from sulphur and devoid of other impurities. In burning, it yields an intense steady heat. Experiments have established that a ton of this coal will yield more heat than a ton and a quarter of any other coal. Hence, its desirability for manufacturing purposes. This coal is laid down in Cumberland for \$1.30 per ton. Cumberland, therefore, offers the manufacturer the best of coal at the cheapest price, that is as compared with the cost of fuel at other industrial centres. But in Cumberland, the coals from West Virginia and Pennsylvania can be purchased for still less money. As for coke, it may be had cheaply from Connellsville, which is on the main line between Pittsburg and Cumberland, or from the Pennsylvania ovens, many of which are nearer to Cumberland than Connellsville, or from the ovens along the lines of the West Virginia Central and Baltimore and Ohio Roads. Charcoal is also to be had in abundance and at slight cost. So much for one of the principal elements in the successful manufacture of iron.

The next most important, the iron ore itself, is laid down in Cumberland most cheaply. Within easy distance are the iron mines of Pennsylvania, and still nearer, the new ore beds of Moorefield, W. Va., which are said to contain 43 per cent. of iron and to be free from silica.

THE WEST VIRGINIA CENTRAL AND PITTSBURG RAILWAY

passes through the Elk Garden and Upper Potomac coal regions in which mines are rapidly being opened. Since 1881, nearly a score of thriving villages have been built along this road and an industrial population of at least 10,000 induced to settle there. Another factor in the cheap production of *iron, lime suitable for fluxing, is abundant in the immediate neighborhood, where also are many beds of fire-clay.

These resources have not been allowed to remain altogether dormant. The Crown and Cumberland Steel Works, near the main line of the Baltimore and Ohio Railway, were built by local capitalists in 1872. The manufacture of tools and spring steel of superior quality is an extensive part of this business. The iron is procured in bar form and melted. Rollers of various sizes and an enormous steel hammer, with a striking force of five tons, are included in the equipment of the works. The peculiar qualities already noted of the Cumberland coal render it of especial value in the making of steel. About seventy men are employed by this company. The capacity of the works is ten tons of steel daily.

The Cumberland Rolling Mills are the most important works in the city and the largest of the kind in the State. These mills were built in 1867, by the Baltimore and Ohio road upon forty acres of land donated to them for the purpose by the city. Just now they are operated under lease by the Cambria Iron Company which uses the product to supplement that of the great Grantier Works at Johnstown, Pa. At present about a thousand men are being employed at these mills, but this force will be greatly increased so soon as the extensive additions now being made to the mills are completed.

In addition to the mineral wealth stored beneath their surface, the hills and mountains of this region bear a large and valuable supply of timber. Every railroad running westward

from Cumberland has opened to this market a valuable tract of timber land. Both in lumber and bark, Cumberland has long done an extensive business. The tanneries located here produce leather of national reputation for uniformity of grain and texture and superiority of finish. There is a splendid supply of hard and soft woods convenient to the city and of superior quality.

The new region which has recently been opened up by the West Virginia Central and Pittsburgh Railway, presents great opportunities to the capitalists and manufacturer in wood who may decide to locate in Cumberland. This line of road runs from this city through a district of West Virginia which abounds in

THE FINEST KIND OF LUMBER

of almost every description—white and yellow pine, spruce, hemlock and the hard woods, such as oak, maple, cherry, walnut, &c. Great quantities of lumber are being shipped daily over this new road, which is steadily extending its rails into the vast timber forests of the State. From the extensive white spruce forests along this road large quantities of pulp wood are daily being shipped to Cumberland to supply a twelve-ton paper mill just completed. In conjunction with this advance the road has been building mammoth sawmills at easy distances. As a result there are many lumber and furniture mills established in Cumberland. The furniture produced is of substantial quality and finish. Still there is room in Cumberland for many more factories of a similar kind. A kindred industry in Cumberland is the cutting on the mountains of laurel and briar roots, from which the best of wooden pipes are manufactured and for which good prices are paid by Eastern manufactures. A pipe factory on the spot would probably be a good investment. One thing that should not be forgotten in discussing the industrial advantages of Cumberland is that labor is plentiful and cheap, owing to the low rents and moderate cost of living. The outside pay for day laborers is \$1.25, yet on this the men manage to live more 'comfortable than they would on double the money in New York.

The industries of the city and county now established employ men principally, and there are but few factories open to women or boys. Consequently this class of light labor is unemployed to a greater extent than in the North, and there is a good opportunity for the establishment of mills employing help of this kind, which, though of a higher grade in point of education and intelligence than the same class of operators in the North, can yet be had more cheaply.

In the manufacture of hydraulic cement Cumberland holds second place in the world and first place in America. The Cumberland cement is produced at less cost than it can be manufactured anywhere else the world over. The supply of "Lower Helderburg" and other limestones from which the cement is made, is found in the suburbs of the city and seems inexhaustible. The stone is excellent quality, analyzing less than 3 per cent. of silica. The cement rock has been quarried for over thirty years by the Cumberland Hydraulic Cement Manufacturing Company. The cement produced is noted for the energy of its action, and will bear a greater admixture of sand than any other natural cement now in use. About one hundred and twenty men are employed by this company.

Another important industry in Cumberland is glass-making. The Cumberland Glass Works were established in 1883, by a number of practical workmen through the aid of the city's Committee on Manufactures. The works are devoted entirely to the manufacture of blown glassware, tumblers, glasses, bar and table supplies. Four hundred thousand dozen glasses were

turned out by the company in 1891, and they found a ready sale. About one hundred and thirty men constitute the present working force of the works.

The F. Merten's Sons' glass factory manufactures bottles of every description, filling orders for bottles of any size, color or shape. This factory covers two acres of ground and gives employment to about two hundred and fifty men. The capacity of the factory is twenty-four pots, and the present output is upward of three hundred gross of bottles daily.

Among the other interests of this firm in Cumberland are a planing-mill, a sash and blind factory and a vast lumber-yard, in which a million and a quarter feet of lumber is kept stored.

To return to Cumberland's mineral resources. Within the coal measures of the Cumberland coal field there are eight veins of pure fire clay, having an aggregate thickness of 53 feet 7 inches, besides other deposits in the adjoining counties of Pennsylvania. There are already several fire-brick factories in this section, which turn out a superior fire brick. Yet so great is the supply of clay that other similar factories would be welcomed.

There are several varieties of sandstone suitable for building purposes quarried in and around the city. Of these the yellow Oriskany sandstone and the pure white Medina sandstone are the cheapest and most suitable for building purposes. There are several other deposits adapted to the manufacture of glass. In the immediate vicinity of Cumberland there are beds of potter's clay and clay suitable for the manufacture of drain-pipe. Although the deposits could be exploited very profitably, there are no factories in either line at Cumberland. The opening in both directions is therefore a good one.

The country surrounding Cumberland produces large quantities of bread cereals. There are several flouring mills in the city which do a large and prosperous business, supplying the

home demand and shipping to New York and Baltimore, and also to South American and other foreign ports. The grain grown is of excellent quality, most of it being raised on mountain land, the effect of which is to give the grain the density and strength of grain grown in the North. The pure mountain water and the ease with which rye and barley of superior quality can be procured has led to the establishment of a number of distilleries and breweries. Whiskey and beer both are made largely for foreign consumption as well as to supply the local demand.

While those above enumerated constitute the larger industries of Cumberland, they are far from including all. In each of the lines referred to, there are smaller factories whose products help materially to advance the volume of the city's output. There are also several cigar factories, carriage factories, coopers' material factories, soap factories, building-brick work, &c.

Before leaving the topic of Cumberland's industries, it should be said that the progressive citizens of the town, and there are many of them, are anxious that the advantages their city possesses as a productive point should be better known, and hopeful that new industries will be established there. To this end they are willing to contribute.

Many of them are wealthy men whose co-operation in any well considered enterprise would insure its success. Quite a large amount of capital could be secured in Cumberland to aid in the establishment of iron and steel works of all kinds, wood and furniture factories, potteries, glass works, cement works or any manufacturing enterprise which might turn to account the raw materials with which the district surrounding the city is so abundantly supplied.

As the centre of a large territory in Maryland, West Virginia and Pennsylvania, Cumberland has become an important

distributing point, and secured a pre-eminence in this direction which her magnificent railroad facilities are sure to retain for her. There are now a number of wholesale houses which are doing a large and profitable business. There are three national banks in Cumberland whose capital and surplus aggregate \$600,000. There are also a number of smaller banks in the neighborhood, so that the monetary facilities for carrying on business are abundant.

There are other aspects to the city than its industrial. As a place of residence, it has many charms, not the least of which is its climate. The elements acknowledge the royalty of the Queen city. In summer, fresh breezes prevent the overheating of the town, and in winter, the storms break their force on its green walls, the Allegany hills, and roar gently over the city. Sometimes, there are sudden changes of temperature in the winter, but they do not seem to have any ill effects upon the people. The town is exceptionally healthy, and malarial diseases are unknown. Invalids find the invigorating mountain air of great benefit to them. Many people from the larger cities resort to Cumberland in summer to recuperate. It is easily accessible, being only four hours from Washington and five from Baltimore or Pittsburg. Within two hours by rail are Deer Park and Oakland, Mountain Lake Park, Bedford Springs, Berkeley Springs and other summer resorts of national fame. All these enjoy a climate identical with that of Cumberland. The situation of the city is most picturesque. It is built on both sides of Wills Creek, and the southern section of it extends along the east bank of the Potomac. The streets are wide and laid off as regularly as the topography of the site will admit. Baltimore street divides the northern and southern sections, and Centre street the eastern and western sections. The former street is the business thoroughfare, though a number of business houses front on Centre and other cross streets. At the eastern end of Baltimore street, the Baltimore and Ohio Railway tracks separate it from Baltimore avenue, on which are many fine residences and substantial homes. The West Virginia Central and Pitttsburg Railway, on the eastern bank of Wills Creek, and the bridge across that watercourse divide Baltimore from Washington street, on either side of which are rows of the most beautiful homes in Maryland.

The City Hall and Academy of Music occupy an entire square and is the largest municipal structure in the State, outside of Baltimore. It was built in 1874–'6 at a cost of \$90,000. The hall fronts on Centre street and is built of brick. The building, which is 72 feet high, has a tower which runs up 145 feet. On the ground floor is the city market, the upper floors being occupied by the council and civic officers. The theatre, one of the finest in the State, takes in the southern half of the building. Its furnishings, stage properties and scenery are equal to those of any metropolitan theatre.

Cumberland is a good place to live in. A brick or frame house of seven rooms can be rented at from

EIGHT TO TWELVE DOLLARS PER MONTH,

and large houses in proportion. At present there is not a vacant house in the city, and more will have to be built. The reason of the low rents is the low price of land and the exceeding abundance and cheapness of building material. In spite of the figures quoted above it is profitable to build houses for rental in the city; but as a rule new-comers to the city are not long before they build homes of their own. Prosperity sits smiling on the face of the citizens, and excessive poverty is unknown.

There are two daily papers. The Times, and the Daily News, which are the leading papers in Western Maryland.

The city is supplied with water by the Holly system of water works owned by the city. There is a well-organized and equipped fire department which has at all times been able to control the fires that have visited the city. The streets are lighted by the Edison system of electric lights and gas. The public schools are well conducted and are supplemented by the Alleghany County Academy and other private schools. The churches are, one English Lutheran, two German Lutheran, four Methodist, one Baptist, two Catholic (English and German), one Presbyterian, one Protestant Episcopal, one Reformed Episcopal, one German Reformed, one Jewish Synagogue, and three colored, two Methodist and one Baptist. There is also a Young Men's Christian Association, with a wellequipped library and gymnasium. Cumberland is pre-eminantly a city possessed of all the modern conveniences. Visitors find that there are several first-class hotels, the largest of which is the Queen city, built and owned by the Baltimore and Ohio Railway, and under the same able management as the hotels at Deer Park and Oakland. The most popular towns outside of Cumberland are Frostburg with a population of 3,804, and Western Port with a population of 1,526.

The chief mechanical industries ontside of Cumberland are fire-brick works at Frostburg, Ellerslie and Mount Savage, and the Cumberland and Pennsylvania Railroad shops at the latter place. Coal-mining is the leading industry, and upon it the present prosperity of the county largely depends, but there is no apparent reason why, with the proper placing of capital, other interests could not be created to add materially to the county's wealth and population. Some attention has been paid to natural gas and oil developement in two sections of the county, though as yet without positive result. The taxable basis of the county is \$17,818,251. The annual amount of general mercantile business transacted in the entire county is estimated at \$3,706,000, the greater proportion of this being transacted in Cumberland and five of the larger towns.

CARROLL COUNTY,

Carroll is the most eastern of the Western Maryland counties. It is bounded by Pennsylvania on the north, Baltimore county on the east, Howard county on the south, and Frederick county on the west. The surface is rolling and picturesque, and the county is one of the most fertile and prosperous in Western Maryland. According to the census of 1890, the population of Carroll county was 32,376, divided as follows: white 30,190; colored 2,185. The area of the county is 426 square miles, and according to the census of 1890, the cereal production was as follows: corn, 1,003,986 bushels from 31,983 acres; wheat, 579,333 bushels from 40,077 acres; oats, 262,458 bushels from 11,972 acres; tobacco, 137,171 pounds from 162 acres; rye, 54,879 bushels from 5,269 acres; buckwheat, 12,543 bushels from 972 acres barley, 3,724 bushels from 133 acres.

The people are industrious and the soil productive, generally of a good quality, susceptible of easy improvement, and acts well with any of the grades of fertilizer and lime. The location of the county, its high elevation and the absence of large tracts of marsh or low lands, keeps it peculiarly free from epidemics of any kind, and the people enjoy good health, many of them living to a vigorous old age. The value of the land ranges from \$25 to \$100 per acre. Grape culture would probably prove remunerative if made a specialty. The climate is better adapted to late than to early vegetables. The facilities for transportation are good, the farthest point in the county not being more than eight miles from a railroad depot. farmers are pretty generally well supplied with all necessary farming implements of the latest improvement. The horses and horned cattle have been much improved during late years, the people in many cases making a specialty of the stock business. They have imported a great many mules recently, principally of Kentucky breeding. At present there is very little manufacturing, but there are fine opportunities for capitalists to invest in this department. Westminster alone does at least \$1,500,000 in business, commercial and otherwise. Westminster, according to the census of 1890, has a population of 2,903, an increase of 15.80 per cent. over the census of 1880. It is a beautiful, healthy and thriving place.

The character of the soil varies in different sections of the county—limestone in some sections, red loam in others, blue slate, yellow slate and honeycomb—all kinds and very susceptible of improvement. The county celebrated on Easter Monday, 1887, the semi-centennial anniversary of its organization. Formed from some of the most fertile and highly favored portions of the rich counties of Baltimore and Frederick, its half century of growth has developed the resources of the soil in a wonderful degree, and it occupies one of the foremost places among the progressive and prosperous counties of Maryland. With a contented, industrious and thrifty population, its prosperity is an assured fact, and their love of improvement gives promise of a bright future to the county.

FREDERICK COUNTY.

Frederick, the oldest of the Western Maryland counties, and one of the largest and most flourishing in the State, is bounded on the north by Pennsylvania, on the east by Carroll county, south by Howard and Montgomery counties and the Potomac River, and west by Washington county. The county contains an area of 633 square miles. It is divided into twenty-one election districts. The western boundary of the county is the top of South Mountain. East of this, and running nearly parallel, is the first mountain ridge of Western Maryland, called the Catoctin Mountain, which is a spur of the Blue Ridge. The country between these two mountains comprises six of the election districts, and is known as the

Middletown Valley, which is watered by the Catoctin creek in its flow to the Potomac. Pen-Mar, the celebrated resort on the Western Maryland Railroad, is situated at the head of this valley, and is right at the northwest corner of the county. The upper end of the county, comprising Hauver's and Catoctin districts, is broken, hilly, and for the most part stony, although there are several fertile little valleys, formed by the Catoctin creek, known as Eyler's, Harbaugh, &c. The next district towards the south is Jackson, which has good, strong soil, mostly limestone. Next comes Middletown, with its heavy limestone soil, and one of the richest and most productive districts in the county. Below this lie Petersville and Jefferson districts, which contain a variety of soil, clay, flint, limestone and loamy land, mostly of good quality and productive. These two districts border on the Potomac River, and the B. & O. R. R. and Chesapeake and Ohio Canal run through their southern borders. In the former of these districts is situated the famous "Merryland tract," the seat of some of the finest homes in the county. Among the families residing there are those of Onterbridge Horsey, Thomas Lee, the Gouverneurs, Deavers, Horines, O'Donnells, Hillearys, Ahalts and others. Here is situated also the Needwood distillery, operated by Mr. Outerbridge Horsey. The remarkable gap in the mountains at Harper's Ferry is a conspicuous feature from this locality. Along the South Mountain, from a point northward of Middletown down to Crampton's Gap, near the Potomac, the battle of South Mountain was fought.

East of the Catoctin mountain lies the Monocacy Valley, watered by the river of that name, much broader than the Middletown Valley, and bounded on the east by the Linganore Hills. Emmittsburg and Mechanicstown districts, which lie about the headwaters of the Monocacy in the northern part of the county, have a variety of soil—slate, flint, clay, loam and red land. Creagerstown, Lewistown and Tuscarora dis-

tricts are mostly red clay soil, with some flint, slate and limestone. They produce large crops of grain. Near Emmittsburg are located the large Catholic institutions, Mount St. Mary's College and Mount St. Joseph's Academy, which is also the headquarters of the Sisters of Charity in the United The Western Maryland Railroad runs through States. Creagerstown and Mechanicstown districts, and there is a branch railroad from Rocky Ridge to Emmittsburg, and also a branch from Mechanicstown to the Catoetin iron furnaces, a distance of three miles. Emmittsburg and Mechanicstown are both thrifty towns, each possessing a number of local industries, such as tanneries, &c. Tom's Fishing and Hunting creeks, strong streams which flow down the mountain sides in this region, afford excellent water-power. Woodsboro, Mount Pleasant, Frederick and Buckeystown districts, extending southward along the Monocacy, comprise the largest extent of prime soil in the county. Nearly all of it is strong, first-class limestone land, comparatively level and almost wholly free from surface rock that would interfere with cultivation. It is unsurpassed by any land in the State for general fertility.

Johnsville, Liberty and Linganore districts comprise a fine farming section—land gently rolling, mostly limestone, with some slate and flint. In this region are situated valuable deposits of copper, zinc and hematite iron ores. The Dolly Hyde copper mines, near Liberty, were operated a century ago, and continued to be worked successfully until stopped in recent years by inflow of water. The Liberty copper mines are near Johnsville, and the zinc and iron mines in Linganore districts. Woodville, New Market and Urbana, together with the three last named districts, comprise the Linganore section of the country, lying east and south of the Monocacy, and drained by the Linganore, Bush and Bennett creeks, tributaries of the Monocacy. The land in these districts is more rolling

and consists principally of slate and flint soil, there being little or no limestone in this section. The land, however, is of a good clay consistency, though varying somewhat in quality. The best is under good tillage, producing excellent crops and well adapted for fruits.

In the western section of the county there is considerable mountain land that would make comfortable homes for industrious settlers, and which can be bought for from one dollar to ten dollars per acre. The better lands in the upper part of Middletown valley, with comfortable improvements, range from \$15 to \$40, while in the lower part, the range is from \$25 to \$100 per acre. In the upper part of Monocacy valley, improved farms range in price from \$20 to \$50, and in the lower part from \$50 to \$120; in the upper Linganore section, from \$30 to \$100, and in the lower portion from \$10 to \$70. Springs and running water abound throughout the county, except in the limestone region, around Frederick and Middletown, which is supplied largely by wells.

The present products of Frederick county are principally wheat and corn and other cereals, hay, potatoes, grass and dairy products. Considerable impetus has recently been given to the dairy interests in the county, and large creameries have been established at Walkersville, Middletown, Buckeystown, Adamstown, Frederick and other places. The low price of wheat and corn has been one cause of the stimulus to the dairy business, the farmers beginning to realize the necessity for a new departure. The mountains in the Linganore section are well adapted to the growth of all kinds of fruit and the cultivation of the vine. The Catawba, Concord, Isabella and other varieties of the grape grow there to great perfection, but little attention has yet been given to the cultivation of fruits of any kind on an extended scale, though it would undoubtedly prove profitable. The mountains are capable of cultivation to their tops, and wines of an excellent quality are

made here in a limited way from the native grape. During his several visits to Frederick while President, Gen. Grant expressed much surprise that the great advantages of the mountain sides in this section were not availed of for the cultivation of grapes. Nearly the whole of this county is excellently adapted for truck farming, and capable of raising to the greatest perfection, all kinds of vegetable and small fruits. Asparagus and celery of the finest quality are produced, and all root crops yield largely, but their cultivation thus far has been for home consumption only. The scope for varied agriculture is unlimited, and especially in view of the fact that there are direct railroad outlets to Washington, Baltimore and Philadelphia by both the Baltimore and Ohio and Pennsylvania Railroads. In regard to machinery, the most improved make is generally used, and abundant supplies of it are furnished by agriculture implement houses in Frederick and by agents at the various railroad stations throughout the county. Horses, cattle, hogs and sheep are generally of superior quality and great attention has of late years been given by numerous stock farmers in the county to the breeding of the best strains of these. The result has been a great improvement in milch cows, roadsters, draught horses, &c.

The manufactures of the county comprise numerous flouring mills and tanneries, three distilleries, the Catoctin iron furnaces, a number of brickyards, hinge factory, several woolen mills, carriage factories, numerous extensive limckilns, several foundries, and one of the largest corn canning establishments in the country. The abundance of water-power in the county and available mill sites, together with the conveniences for procuring coal by railroad and canal, and timber of all kinds from the forests of Pennsylvania and Virginia, added to the mineral resources, present great inducements for certain kinds of Manufactures. The enormous output of pig iron from the Catoctin furnaces, when in operation, together with the large

quantities of iron that might be produced from other ore deposits, could all be worked up to advantage in the county, if rolling mills and other iron industries were established, instead of being transported to other States. The manufacture of agricultural implements and machinery, woodwork for carriages, &c., could also be profitably conducted; and if truck farming was more generally introduced, a superior quality of all kinds of seed could be supplied. A pickling factory on a large scale, it is thought, could also do well.

According to the census of 1890, the population of Frederick county was 49,512, divided as follows: white, 42,865; colored 6,646. Frederick city, according to the census of 1890, contains a population of 8,193.

Among the larger towns outside of Frederick, are Emmittsburg, Mechanicstown, Middletown, Woodsboro, Jefferson, Walkersville, Buckeystown, New Market, Liberty, Unionville and Point of Rocks. Of macadamized roads there are about 125 miles, and between 1,200 and 1,300 miles of country roads. The public schoolhouses number 151, and the pupils who attend them nearly 11,000. The churches, representing all denominations, number about 140. In 1880, according to the census returns, the county had 13,326 horses, 13,793 milch cows, 14,544 other cattle, 12,672 sheep, 38,074 swine. The farm products were 1,774,256 bushels of corn, 1,418,542 of wheat, 94,267 of oats, 42,502 of rye, 133,390 of irish potatoes, 370,840 pounds of tobacceo, 74,857 pounds of wool. There were at that time 444 manufacturing industries in the county, with capital of \$1,828,927, and products of the value of \$2,806,098.

The opportunities afforded in Frederick county for industrious immigrants are believed to be as good as anywhere in the United States. The colored help is, to a large extent, inefficient and unreliable, and industrious white immigrants would be welcomed and have no difficulty in securing employ-

ment at remunerative wages, or cheap homes where they could rapidly thrive and prosper.

GARRETT COUNTY.

Garrett, the last formed of the Maryland counties, is located in the extreme western portion the State. It contains an area of 680 square miles of territory, with a population (census of 1890) of 14,213, divided as follows: white, 14,030; colored, 183. The agricultural productions, according to the census of 1880, were corn, 90,777 bushels, from 3,714 acres; wheat, 44,399 bushels, from 4,122 acres; buckwheat, 72,333 bushels, from 4,989 acres; oats, 171,723 bushels, from 8,657 acres; rye 21,552 bushels, from 2,746 acres; tobacco, 1,927 pounds, from 4 acres.

The Great Savage mountain, better known as the backbone of the Alleganies, crosses the county from north to south. On the east side of the mountain is the Maryland coal basin, about one-third of which is in Garrett county. On the western side of the backbone, and lying between that and Meadow mountain, at an elevation of two thousand five hundred feet above tidewater, is a vast table-land, covering an area of four hundred square miles, one-third of which is glade land, and is unquestionably the finest portion of the State for grazing and stock raising. There is, perhaps, no county in the State which contains such valuable mineral deposits in coal and iron ore. Fire clay and limestone of a superior quality abound also.

The soil is a dark, rich loam, which is very productive, and readily yields 25 bushels of wheat, 40 bushels of oats, 40 to 60 bushels of corn, or 200 bushels of potatoes per acre, without fertilizers. The soil, which is naturally good, is easily improved, and a coat of lime acts like a charm upon it. The country is sparsely settled, and there is, therefore, a great deal of uncultivated and unimproved land, much of which is for

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sale. Unimproved lands may be bought in large or small tracts, at prices ranging from three to ten dollars per acre, whilst improved farms command from ten to thirty dollars per acre.

Notwithstanding the natural productiveness of the soil and the numerous other advantages possessed by the early sattlers, they paid very little attention to agriculture beyond the raising of a little buckwheat, oats, and a few potatoes. In later years, however, the forests are being cleared out, farms opened up, and a large number of the most intelligent and best citizens of the country are turning their attention to farming as a business, and are growing, in addition to the crops raised by their predecessors, large crops of wheat and corn, and in addition to these, wool, maple sugar and butter are produced in large quantities annually.

Facilities for reaching market are ample in all parts of the county. The Baltimore and Ohio Railroad runs through the southern portion of the county, from east to west, for a distance of thirty miles. On the southeastern border runs the West Virginia Central and Pittsburg Railroad for a distance of thirty miles or more. On the east is the Cumberland and Pennsylvania Railroad, and the National turnpike road traverses the northern portion of the county for a distance of twenty miles. The northern part of the county has access to the Pittsburg and Connellsville Railroad, a branch of which runs to Salisbury, which is located very near the Maryland and Pennsylvania line. The large number of towns along the railroads, and especially those along George's creek, in the mining region, furnish good markets for nearly all the produce raised in the county. Improvements in labor-saving machinery and farming implements are keeping pace with the general advance all along the agricultural line, and nearly every farmer is provided with reapers, mowers and grain drills, as well as the latest improved plows, harrows and other utensils. Stock-raising is one of the leading industries, and the farmers and graziers are constantly introducing new breeds of animals for the purpose of improving their stock.

Being the highest section in the State, Garrett county is exceptionally healthy. Malarial diseases are unknown, and invalids, especially those suffering from hay-fever, find the invigorating mountain air of great benefit. In the summer, many people from the larger cities, especially from the south and west, resort to the great health-giving resorts, Oakland and Deer Park, which are situated in this county, on the line of the Baltimore and Ohio Railroad, to recuperate. The situation of these two resorts, 2500 feet above the sea, is most picturesque. Oakland is a thriving place and has a population of 1,046, an increase of 14.95 per cent. over the census of 1880.

Manufactures in Garrett do not amount to a great deal, and are limited to two or three woolen factories, about the same number of tanneries, and a few lumber mills, which turn out various kinds of lumber, shingles, laths, shooks, staves, &c. The future of this county probably lies in its capacity for agricultural products, and not in its prospect of becoming a manufacturing community. The time is not distant when this will be a great agricultural county. The amount of mercantile business done annually in the towns of the county would probably reach the sum of \$200,000.

One of the most interesting features in this connection is the opportunity afforded to industrious and steady immigrants and farmers of small means to procure homes for themselves and families. The sparsely settled condition of the county, the large amount of unimproved land for sale, the productiveness of the soil, the facilities for reaching market, coupled with the advantages of climate, offer special advantages to settlers.

MONTGOMERY COUNTY.

Montgomery borders on the central and southern sections of the State, and partaking to some extent of the characteristic features of all three divisions, presents a great variety of surface, soil and resources. The Potomac river forms its western and the Patuxent its northern and eastern boundary, separating it from Howard county. Frederick county is contiguous on the north, and Prince George's county and the District of Columbia on the south. Its area is 508 square miles, of which 175,000 acres are under cultivation, 60,000 in wood, and the remainder unimproved. According to the census of 1890 the population of the county was 27,185, an increase of 2,426 over the census of 1880, or 9.80 per cent. It is divided as follows: White, 17,472; colored, 9,710. The crop statistics in 1880 were as follows: Buckwheat, 3,057 bushels, from 260 acres; eorn, 1,020,573 bushels, from 35,287 acres; oats, 59,537 bushels, from 3,126 acres; rye 17,109 bushels, from 1,785 acres; wheat, 625,702 bushels, from 35,673 acres; tobacco, 806,036 pounds, from 1,053 acres. The census of 1890 shows that Montgomery, with one exception, grows more wheat to the acre than any county in Maryland, the average yield being 171 bushels. Washington is the banner county in this regard, yielding 253 bushels per acre, while Frederick, which follows Montgomery in the order of production, gives an average of 17 bushels to the acre.

Rockville is the county seat and the largest town in the county, having a population of 1,568, an increase of 880 over the census of 1880 or 127.91 per cent.

The county has made great improvement agriculturally in recent years, and is now one of the most prosperous and progressive counties in the State. There is still, however, a good deal of unimproved land, and the county offers unusual facilities for making of comfortable homes for industrious immigrants. The soil is principally red clay sub-soil, but

ranges all the way from the rich loam of the river bottoms along the Potomac and its many other streams to the sandy soil near the lower edge of the county. Most of the land is highly improved, and sells for from fifty to a hundred dollars per acre, but there are sections as yet comparatively unimproved of first-rate quality that can be bought for from fifteen to thirty dollars per acre.

The ground is rolling, not hilly, broken enough, however, to keep well watered, but not marshy, with here and there a hill, the southern side of which grow the earliest and sweetest fruits and berries. Wheat, corn and hay, are the staple products, and the amount of these produced to the acre is steadily increasing. In some sections truck gardening is extensively operated, and the markets of Washington receive a large proportion of their fruits, berries and vegetables from this source. The success with which these efforts have been attended, indicates that the markets of Baltimore as well could be profitably supplied. The plentiful supply of clover and timothy which the now fertile land produces, has induced many to operate stock, grazing and dairy farms. The exhibition of stock owned in Montgomery county, displayed at the county fair, was very fine. In Washington many fine horses are owned, and during the summer, when the owners are away, the animals are sent into this county to be kept and recuperated for their use in the winter, and as the owners are willing to pay good prices, considerable money is thus made. Many gallons of milk and cream are daily shipped to Washington, and the B. & O. has made special arrangements to carry the milk, etc., and this with the quantity which is brought to the numerous creameries situated in the county, show that the dairy business has its inducement

Lying adjacent to the District of Columbia, and connected with it by the Metropolitian Branch of the Baltimore and

Ohio Railroad, the Chesapeake and Ohio Canal and numerous electric railroads, communication with Baltimore, Washington and all parts of the United States, is very convenient One can easily shop or attend to business in those cities, going and returning the same day. The Baltimore & Ohio Railroad has twenty-seven stations to the twenty-nine miles it runs through the county, with a proportionate large number of trains. present the B. and O. is building a southern connection through the lower part of the county, which will be of great advantage. For shipping purposes the canal is cheap and commodious. There is a convenience in this method of transportation not to be met with in railroads, that of not having to haul to a station, as the whole canal is one depot. The roads are improving, and those met with near the District line and in the northeastern section of the county are worthy of note. Before many years are passed, the whole county will be connected by pikes like that magnificent one built by the United States from Georgetown to the Great Falls in this county. This road is known as the Conduit road from the fact that the water supply of Washington is conveyed from the falls by pipes buried under the roadbed, with the advantage of quick communication with large cities. As the ground is naturally adapted to trucking, this industry will soon develop into immense proportions.

And the climater is in keeping with all else, for winters are just cold enough to kill the disease germs and make sufficient ice for use. The summers are pleasant, and draw large crowds to spend the hot season. The absence of tornadoes, floods, drouths and infectious diseases show that this county has nothing to fear from its climatic conditions. The physicians of Washington continually send their patients into the county, and the effect of the pure air and water, the fresh fruits and vegetables, is best known by the fact that doctors testify to their appreciation of the benefits derived. Indeed, there have lately been built extensive sanitariums, not, however, for the use of the inhabitants.

The social advantages of this county are beyond question. True worth and morality are the standards by which a stranger is measured, and not wealth or ancestral fame.

There are amusements for all sets and classes—athletic sports, hunting and fishing, husking matches, and church entertainments and societies, euchre parties, hops and germans. The influx of wealth has done much to enliven, whereas the natural hospitality and unpretentiousness of the old inhabitants still keep the society within limits unextravagant enough for the entrance of those of moderate means.

No one can complain of the scarcity of churches. Rockville has eight, and yet the neighboring villages do not suffer by comparison. There is scarcely a denomination that has not many comfortable, and, in some instances, elegant edifices, and a new comer need not fear that he will be forced to change his creed for want of a house of worship.

Maryland, with a remarkable school system, has no county in which the children are better taught, the schools kept open longer or situated closer together. The universality of attendance, and the many men who have won fame and fortune without other education than that they obtained from the public schools of this county, are sufficient testimonials of their value. To those wishing a scientific or professional education, the opportunities are remarkable. A number of well-known academies and seminaries afford the best preparation, and the number of students who attend the universities of Washington, going and returning each day, attest the convenience and practicability of this course.

Considering the wonderfully low assessment, the taxation is very low, and lately, when a new court house, costing \$50,000 was erected, not a complaining voice was heard. This is good proof that the people do not regard themselves as oppressively taxed. It is remarkable that with the great development the county's debt should remain so small.

There is a great demand for good artisans and farm hands, and excellent wages are paid.

The numerous streams are not surpassed in the water power they afford for all varieties of manufactories and mills, and, taking into consideration the low taxation, the short winters and the proximity to raw material and good markets, it is plain there is money for enterprising men, who would direct their efforts to the utilization of the water power. The Great Falls of the Potomac alone have power enough to run all the mills of New England, and a large manufacturing eity may confidently be looked for at that point. The large quantity of land that is continually changing hands brings an immense amount of money into this county, and thus makes it much easier for the poor.

The development of the deposits of gold, silver, mica and chrome found will add to the wealth of the county. But it is because of the surely great future of Washington that the residents of Montgomery county can rest assured that great and inestimable results will follow.

The effect of proximity to the District of Columbia has already been remarkable. Five or ten years ago there were from 1,300 to 1,400 acres of land, for the most part connected and all lying in the county, sold for \$30,000. In the last five years those same tracts have been resold for \$500,000.

The land as a general rule, bordering along the railroads and the district line is too expensive to offer any great inducements for those of moderate means, selling for from fifty dollars to five hundred dollars an acre; but after leaving these lines for a mile or two, good and fairly improved farms can be purchased at from \$20 to \$30 per acre, and in some sections as low as \$10 to \$15 an acre. While at present the land immediate to the district and railroads only commands such enormous figures, it is only a matter of a few years when

the land more remote will be governed by these prices. And here is the chance for immigrants. If they have enough money to buy a farm of the land selling for from \$10 to \$30 an acre, they can, with care and industry, make a good living from the start, and in a short time give their farms an attractive appearance; and then, when the boom has spread, as it surely will do, into their immediate neighborhoods; they will be able to dispose of their places for a sum far beyond the original cost. Any one thinking this a visionary scheme need but study the situation to find it a sure, substantia reality.

The Chautauqua Society has lately erested to million-dollar building within the county, on the banks of Potomac, or "the Rhine of America," as they have expressively named it.

WASHINGTON COUNTY

Washington county is located in the western part of Mary land, and includes within its limits the southern portion of the famous Cumberland Valley. This valley comprises almost the entire county. The surface of the land is rolling and in places extremely picturesque. The soil which is very strong and highly productive, is of clayey and limestone formation, with occasional streaks of slate. On the mountain ranges, however, freestone predominates. A very small quantity of good timber remains, as it has been gradually cut to make room for crops. The soil is best adapted for the production of wheat, corn, oats and hay, and these crops are cultivated to the exclusion of others. Very little buckwheat is raised, and no barley is sown. Tobacco has been successfully raised in several parts of the county, and the erop has compared favorably with that produced in Pennsylvania; but no serious efforts have been made to raise it as a permanent product. The experience of several generations of farmers seem to prove that better results are obtained in this county from wheat and corn than any other products.

Washington county has long been noted for its success in producing these cereals. During the fifties, before the west became so thickly settled, this county stood third among the counties of the United States in its production of wheat. fact, the largest average yield an acre in a test case on record in the United States, was in this county. The yield amounted to slightly over sixty-three bushels per aere. The best land in the county lies between the South and North mountains—the two ranges of the Blue Ridge. This is entirely of clay and limestone formation, with the exception, however, of a strip of slate on the Conococheague Creek. From the North Mountain to the western limits of the county, which is a small section of the county, the soil is not so productive. The best land brings from sixty to one hundred dollars per acre, the price being controlled by the improvements, the fertility and the proximity to the county-seat. Along the Potomac river, excellent land can be purchased for thirty-five to fifty dollars. What is known as the slate land is bringing from five to thirty dollars an acre, although recent cultivation is steadily enhancing its value. This land produces wheat of an excellent quality, but the quantity is small. Fruit is now being extensively cultivated on this soil.

The peach culture has of late years converted the mountain land into the highest priced land in the county. Formerly its market value was about one dollar an acre. At the present time, without being cleared, it readily calls for eight to ten dollars an acre, and with a growing peach orchard it will bring one hundred dollars an acre. The largest peach-grower in the world—a resident of Delaware—gave it recently as his opinion that the Blue Ridge Peach of this county surpassed in color and flavor any fruit of the kind grown in the United States.

There are parts of Washington county, near Pen-Mar, where the Western Maryland Railroad runs through miles of peach orchards as continuous as in the peach belt of the peninsula. During the past season much of the forest growth on the mountain sides has given place to regularly-planted rows of trees, and orchards are gradually covering the whole face of the border territory in Pennsylvania, as well as extending down into Frederick and Carroll counties of Maryland, so that in a few years there will be as much business during the summer for railroads in Western Maryland as on the Eastern Shore. The time is not far distant either when every hillside will be covered with orchards and wineyards, for fruits of all kinds adapted to our latitude, such as apples, peaches, pears, cherries, grapes, &c., flourish in all the western counties, and the cultivation of the peach in the mountain region has given value to lands which only a few years ago were worthless, except for the timber and bark of the forests on them. The difference which the change has already made in the aspect of the country is as much a surprise as a pleasure to the eye. Order and the evidences of systematic labor have so transformed much of the mountain land, that the Blue Ridge region has lost a good deal of the wild appearance which was formerly its main characteristic. But the change does not mar the picturesqueness of the mountain scenery in the least. On the contrary, it adds pretty details, and tones down the wild and rugged spurs of the range and brings the hills into harmony with the valley by a continuous strain of prosperous agriculture. Peach orchards thrive equally on the mountain sides and tops and in the valley, and they are gradually, in company with the grape, assuming sway at such a rate as in a few years to predominate.

But for the Western Maryland Railroad, there would have been little or none of the remarkable development of the Blue Mountain region, agriculturally or otherwise. Baltimoreans are accustomed to the Pen-Mar and summer resort travel from the city to the mountains, but they are not aware of how large the travel is daily during the summer season from the prosperous border counties of Pennsylvania, from Hanover, Gettysburg and other more distant points in that State. It may be reasonably expected that when the Potomac Valley link is completed from Williamsport to Cherry Run, and the York and Reading and Harrisburg extensions are completed, not only general traffic will flow toward Baltimore, but that travel from a large area of the rich State of Pennsylvania will seek our mountain resorts, and that capital will come, too, to help the development, now so well under way. For summer sojourning there could not be a more accessible or more beautiful mountain region than Pen-Mar and the Blue Mountain House overlooking the grand Cumberland Valley, and the magnificent new hotel at Buena Vista Springs, perched on a mountain spur like a great castle. This building is a grand object, not dwarfed or made insignificant by the natural surroundings, but, on the contrary, fitting the scene and supplying a motive for the picture. Besides these extensive establishments, there are a number of smaller hotels and boarding houses, which have all been put up by Baltimore city and local capital and energy. The number of resorts already in the mountains presages further enterprise in this direction. Those which are in the Blue Ridge region will in time make it necessary for others to be put up, for the region is the natural resort of the populous towns and cities of the District of Columbia, of Maryland, of Delaware and of a large part of Pennsylvania. In order to get the full benefit of mountain air and to enjoy the grandeur of mountain scenery, surrounded by every comfort and luxury, it is no longer necessary to make lengthy and expensive journeys to the northward. Here, from three States and the District of Columbia, the beautiful blue mountains of Maryland-Pennsylvania are accessible in a few hours.

The farms of Washington county contain from fifty to five and six hundred acres. Very few of the latter farms now

remain. The average contain about one hundred and fifty acres.

The average yield of wheat throughout the county is about twenty-five bushels to an acre, although crops as high as forty bushels have frequently been gathered. The average production of corn is fifty bushels to an acre. In 1891, however, fifty flour barrels to an acre of this crop were produced on small and highly-cultivated patches.

Farming throughout the county is conducted on intelligent and scientific principles, and the very best improved machinery is used. Of late years many farmers have been using up their inferior corn and other products in fattening cattle over winter for market. These stall-fed cattle are generally purchased in West Virginia, although a large number are raised in this county.

The raising of poultry has become an additional industry, and considerable attention is now given to it. This is because of the easy access to the city markets. No county has such excellent facilities for the transportation of its products as Washington county has. Four railroads, which make direct connection with important trunk lines, traverse the greater part of the country in all directions, and the western or remaining portion, is paralleled by the main stem of the Baltimore and Ohio Railroad and the Chesapeake and Ohio Canal. The canal follows the entire southern trend of the county, and offers an excellent local market and facilities for shipment of farm products. Every farm in the county is within easy reach of a railroad.

Besides the railroads, this county possesses one of the finest systems of macadamized roads in the country. Eight pikes radiate from Hagerstown, and these are intersected by others in different parts of the county.

Within the last fifteen years great attention has been bestowed upon fine-bred stock. The finest strains of imported

Percheron, Clydesdale, French coach and standard bred horses are now owned in large numbers throughout the county, while nearly every farm is stocked with Durham, Short-horn, Jersey, Hereford, Holstein or other imported cattle. This is true also in reference to hogs and sheep. Hagerstown is one of the most important horse markets in the country. Local firms ship almost weekly large consignments to Washington, Baltimore, and as far east as Boston. Most of the seaboard cities are within a distance of three to nine hours from Hagerstown.

The local market is, however, rapidly developing. Hagerstown, the county seat, is already an important railroad center, and it is fast becoming a large manufacturing place. New industries are springing up rapidly, and before many years it will be the principal manufacturing locality in the State, outside of Baltimore. Besides the industries which are backed by local capital, several extensive foreign plants have already been located there, and others are in contemplation. At least two thousand persons are now engaged in the manufacturing enterprises of Hagerstown. Washington county, besides its generous soil for agriculture, contains good iron ore in paying quantities, excellent brick clay, quarries of the very best quality of blue limestone for building purposes, and large deposits of cement rock, which is now being extensively converted into the very best hydraulic cement.

The water system is very extensive. The Antietam and Conococheague creeks, with their tributaries, drain the greater portion of the county, while the Potomac river flows the entire length of the county on the south. Innumerable springs and running streams of pure and wholesome water are found in every section of the county. There is scarcely a farm that has not running water upon it. The farms are generally improved with large brick and stone buildings. Of recent years, however, there have been many frame barns and houses erected.

The society throughout the farming districts is sociable, intelligent and refined, and will compare favorably with any other rural section of the country. The climate is excellent. It is the most healthy section of the state; an epidemic is scarcely known. Churches of different denominations are located all over the county and are within a short distance of every home.

The school system is most excellent. The teachers are intelligent and painstaking. There are now 137 school houses owned by the county. In addition to the houses, the county rents 210 rooms for educational purposes. Four new school buildings were erected during the past year. The value of the school property owned by the county is \$162,638, and the disbursements for school purposes during the year ending July, 1891, were \$68,921,50. The rate of taxation is: State $17\frac{3}{4}$ cents, and county, 78 cents, on the one hundred dollars.

The area of the county is 435 square miles. According to the census of 1890, the population was 39,782, an increase of 1,221 since the census of 1880. There are in the county 37,191 white, and 2,590 colored persons.

There are a number of thriving towns in the county. Hagerstown, the county seat, is beautifully situated in full view of the mountains, is supplied with gas and water, has two fine large hotels and a number of smaller ones, many handsome churches, stores and private residences, banks, etc. It has a population of 10,118, an increase of 3,491, over the census of 1880, or 52.68 per cent. Williamsport is the next largest town, with a population of 1,277, and Sharpsburg comes next, with a population of 1,163. Hancock, situated on the Chesapeake and Ohio Canal, and the great National Pike is also a prosperous place. The town is stretched about a mile along the pike and contains a variety of industries. Here are located several saw mills, a sumae mill, and the famous Round Top

cement works of Messrs Bridges & Henderson. The town contains a Catholic, a Protestant Episcopal, a Methodist, a Presbyterian, and a colored church. The scenery in this locality is picturesque and there are many places of historic interest. Old Fort Frederick, the last relic of the French and Indian war in Maryland, is situated a short distance from the town, and the house of Michael Cresap, the indian fighter, is still standing in fair preservation.

THE EASTERN SHORE.

HOME OF THE DIAMOND-BACK TERRAPIN, THE OYSTER AND THE PEACH.

The Eastern Shore of Maryland is one of the three sections into which the peninsula formed by the Chesapeake and Delaware bays and the Atlantic ocean is divided. The other two are the State of Delaware, contiguous on the east, and the Eastern Shore of Virginia, contiguous on the south. The Eastern Shore of Maryland comprises the counties of Cecil, Kent, Queen Anne's, Caroline, Talbot, Dorchester, Wicomico Somerset and Worcester. It is abundantly watered by half a dozen noble rivers, with many important tributaries, which with the waters of the bay, abound in choice fish and oysters. The famous diamond-back terrapin finds its chosen habitat in Eastern Shore waters, and the choicer varieties of wild duck, besides other game, are usually abundant in season. The soil is generally level and easily tilled. It is specially adapted to the cultivation of peaches and other fruits, which are raised in immense quantities, and to the raising of cereals, hay, live stock and a great variety of vegetables. The Eastern Shore counties are all provided with railroad facilities, which it is

proposed to increase by the construction of a line down the peninsula parallel to the Delaware Railroad. The Annapolis and Eastern Shore Railroad running through the lower counties, with a water terminus opposite Annapolis has been completed and is now running. There has been a considerable immigration from the North and West in recent years, but there is still plenty of room. This section of the State has made rapid progress since the war.

TERRAPINS.

The Chesapeake diamond-back terrapin is as widely and as favorably known and appreciated as the Chesapeake ducks. They are caught all along the shores down as far as Accomac county, Va., on one side, and the Rappahannock river on the other. Below these points the water is too salty to produce a prime terrapin, as it toughens them.

It is estimated that at the present time, \$1,500,000, worth of terrapin is caught out of the Chesapeake Bay and its tributaries every year. As the price averages fully \$30 a dozen, this represents 300,000 terrapins annually. During the season over 500 men are engaged in catching them. They are caught on both sides of the bay, from the Rappahannock to Baltimore. They are found wherever the water cresses grow, and the Chesapeake Bay is the best body of water for this grass in the world. There are several methods of catching the terrapin, one is by dredge, another by a seine, another by a net, and still another by a three pronged stick. With the latter, the catcher prods in the mud until he feels something move and then he reaches down for the diamond-back.

THE OYSTER TRADE.

The oyster industry of the Chesepeake Peninsula, when considered in its several branches of planting, dredging, tonging and packing, is something wonderful. It gives employment to over fifty thousand people, and it is estimated that \$10,000,000, of capital is employed and \$15,000,000 of busi-

ness is done annually in this department of Maryland's industries.

There are about one thousand boats, of an average tonnage of fifty tons each, engaged in dredging for oysters for the Baltimore market and supplying vessels for other markets. The average quantity dredged by each one of these boats during the oyster season is four thousand seven hundred and forty-six bushels. There are also fifteen hundred and fifty-five canoes engaged in tonging for oysters, and it is estimated that these canoes eatch one-third as many oysters with tongs as are dredged by the one thousand boats.

The oyster season begins about the middle of October, and lasts during the entire winter, when the condition of the harbor will permit the entrance of vessels. The number of tin cans used in the business is estimated at twenty millions per annum. The cans are made at shops where nothing else is done, but many of the largest packers employ can makers, and have their own shops for the accommodation of their own business.

The following statistics are extracted from a table which was carefully prepared for the use of Mr. C. S. Maltby, and it makes an interesting exhibit, showing the quantity of oysters used annually, where obtained, and the quantity assigned to Baltimore. The total number of bushels used is estimated at 6,945,000, of which 4,880,000 bushels are caught in Maryland waters, and 2,065,000 bushels in Virginia waters. The number caught by dredging is estimated at 4,746,334, and with tongs 2,198,666 bushels.

The amount assigned to Baltimore is used as follows:

	Bushels.
Estimated quantity packed raw	1,875,000
Estimated quantity preserved	1,360,000
Estimated quantity city and country trade in	
shell	$625,\!000$
m = 1	
Total	3,860,000

By far the greater portion of the oysters caught in the Chesapeake bay and the streams emptying into it are brought to the surface by the dredger, and so important has this industry become that legislative action regulating it has biennially come up before each session of the General Assembly of this State.

To enforce the law, the State has a navy, consisting of four steamers, three schooners and seven sloops, which is supported by the \$250,000, annually paid into the state treasury for dredgers' licenses.

An oyster dredger (referring to the vessel) is almost always a two-masted schooner. When her windlasses are removed from the deck, the only difference between her and any similar craft is about midships on both sides, where the rail is cut down to the deck, for four or five feet and an iron roller inserted flush with the deck, over which the dredge line works. A pungy is properly, smaller than a dredging schooner, but of the same rig, and sometimes has no rail, but a strong stanchion is placed just abaft the roller.

Each vessel is provided with two iron windlasses, which are fastened to the deck near the openings in the rail. As the law prohibits the use of steam in casting or hauling the dredges, these windlasses are arranged so as to admit of four men working upon each, two on each side of each windless. The handles slide upon an iron rod, and as soon as the dredge is on deck a rapid motion unships the handles, and the cylinder of the windlass can revolve as the dredge goes out, while the handles remain stationary.

The dredges are iron bags capable of holding a little over two bushels. They are formed of rings connected with S hooks. They are about thirty inches square, and upon the lower edge of the opening are provided with an iron bar with projecting teeth, which scrapes the bottom of the stream as the dredge is being drawn after the boat, and guides the oysters into its mouth, which is held open by an iron frame with bars projecting from each corner. These bars meet about four feet from the opening, and at their place of contact a chain is fastened, to which is attached a rope which goes around the windlass and is known as the dredge line. This line varies in length from twenty-five to sixty feet, according to the depth of water in which the dredging is done.

The only other instrument used in dredging is the captain's sounding pole, a slim rod about thirty feet long which he prods up and down in the water, in order to ascertain whether the vessel is over an oyster bed or not.

The crew of an oyster dredger usually consists of a captain and eight men. The captain is seldom owner of the vessel in which he sails, but works it on shares. Most of the schooners and pungies sailing out of Baltimore are the property of persons who own a fleet of vessels, sometimes twenty or more. Many of these owners are proprietors of houses of entertainment, where they board their captains and crews when on shore.

The hardships undergone by dredgers are indescribable. Hour after hour, in all kinds of weather, they work at the windlass pulling in two hundred or more pounds of oysters and the same weight of rope and dredge, and when that labor ceases, they are busy for hours more culling on deck or in the hold. This work is equally as tedious, tiresome and laborious as that at the windlass. In a stooping position with their feet about eighteen inches apart, they separate the shells from the oysters, dropping the former in front of them, while the latter they throw some distance behind them. Often after a night's hard work and but a brief rest they find the deck-load of oysters frozen in a solid mass. Then, with everything covered with a glare of ice, amidst a cutting sleet which freezes as it comes down, they are compelled to separate by hand each oyster from the other, and offtimes, with frozen limbs and aching backs and heads they toil on unremittingly to save the cargo they have caught.

When a vessel arrives upon the ground on which it is proposed to dredge, the captain takes his position at the wheel. while the crew of eight men stand by the two windlasses. With his sounding pole the captain feels the bottom of the stream, the vessel all the while sailing as rapidly as the prevailing breeze will admit, and when convinced that he is over oysters, will cry out, "heave." Immediately, the dredges are caught up and thrown over the sides of the vessel. After a brief interval, a second order is given—"wind up"-when the windlass is manned and the dredge brought up on deck. The oysters and its other contents are dumped out and shoveled out of the way, while the dredge is again thrown, and again returned to the deck. This is continued until the captain finds that he is leaving the oyster bed. when the vessel is put about and returns, dredging parallel to her former course. Not all are oysters that come up in the dredge. Sometimes over half or more of the contents are shells, and many curious things are also brought to the surface. One, two or more crabs frequently form a part of the catch; seaweed, fish, debris of various kind are also brought to the surface. Oysters are found adhering to all kinds of articles-pieces of iron, wood, leather and glass are found covered with bivalves of all sizes. If the dredging is done in the daytime, the oysters are culled as rapidly as possible as fast as caught; if at night, they are held until daylight. No rest is taken as long as the wind blows. except a brief interval for meals.

Most of the oysters brought to Baltimore by dredgers are sold to raw and steam packers, the largest sizes to the former and the smaller to the latter. The oysters are not sorted by the captains or crew, but are sold as they are, for so much a bushel. If they present a fair appearance and are apparently large in size, they naturally bring a much higher price than if small. They are divided into three

classes by the shuckers in the packing houses, and are known as "Selects," "Medium" and "Standards." These are packed in tin cans and buckets, kegs and barrels. Some dealers pick out the largest oysters before they are shucked and ship them in the shell or sell them for home consumption A bushel of shell oysters will generally produce a gallon when shucked, for which the shucker receives from fifteen to twenty cents per gallon. Rapid shuckers, if constantly employed for twelve hours a day, can open from fifteen to twenty bushels of oysters.

In the steam-houses the oysters are slightly cooked before they are opened, and the work is mostly done by women and children.

Most of the oysters used by restaurants and hotels in Baltimore and elsewhere are secured by tongs or nippers, and as a rule are superior in size to those caught by the dredges. The tongmen form a very large army of men engaged in catching oysters in Maryland waters, and while the quality and size of their product is much superior to that caught by dredgers, it is infinitely smaller, forming but a trifling proportion of what is annually taken from the bay. Tongs are used only in shallow water, and the oysters are caught from a small boat, generally operated by two men, one on either side. The tongs consist of a pair of rakes with the teeth curved inward and attached to wooden handles from fifteen to twenty feet long, which are joined by a pin about onethird of the distance from the iron. The tongman has a platform placed amidships across his little craft, and when over his beds he plunges his tongs into the water open, and working the handles secures a few oysters, not more than half a peck, and, closing the tongs, brings them up to the platform on his boat, where he culls them and makes a second dip. This he repeats until he has secured a boatload, generally not over half-a-dozen bushels as the result of the labor of two men for an entire day. Planted ovsters caught with tongs are very large and fine, and bring high

prices. The largest and finest oysters brought to the Baltimore market are eaught with nippers, one at a time, in clear, shallow water, where they can be seen by the man sailing over them in a small boat.

In addition to the oysters caught by dredgers and others in Maryland waters for consumption, there are many thousand bushels annually caught in the Chesapeake Bay for the purpose of transplanting in other waters, and this is, in itself, no inconsiderable branch of the business. They propagate rapidly, and mature in three or four years. It is estimated that the total annual oyster crop of the world is 8,903,000,000, of which North America furnishes 5,572,000,000 bushels, the balance being divided among other countries.

THE PEACH INDUSTRY.

Fifty years ago the cultivation of peaches for the markets, was unknown in Maryland and Delaware. Only in certain sections of New Jersey was this interest looked upon as of any importance. The American people were not then such fruit eaters as they are now, and the limited supply was sufficient for the demand. As time progressed and rapid transit increased, the demand increased enormously, and the cultivation of peaches as a business grew into importance in both Delaware and Maryland. Men who had been indifferent farmers, engaged in peach culture and grew suddenly rich. The brilliant success of different peach growers, created in the minds of the Delaware and Maryland land owners, the impression that peaches would prove for many years to be a most profitable crop, and as a result, every section of the peninsula, which comprises Delaware, the Eastern Shore of Maryland and of Virginia, is more or less interested in the cultivation of peaches, and it may safely be calculated that they are now growing on that peninsula upwards of twenty millions of peach trees.

It is estimated that there are upwards of sixty thousand acres of land under peach trees in Maryland. This land is the best on the peninsula, estimated to be worth fifty dollars per acre or \$3,000,000. To ship this fruit requires two millons of baskets, or nearly that imany, which costs \$250,-000. The money invested in necessary implements for cultivating and shipping the peaches to market, is estimated at ten dollars for every one hundred trees, or \$600,000. The cultivation of peach orchards and the picking of the fruit, gives employment to upwards of twenty-five thousand laborers. The growing to maturity of a peach orchard requires the expenditure of at least thirty dollars per acre, or upwards of \$1,800,000 on the orchards of Maryland. Nearly six millions of dollars of capital are now invested by these growers in peach culture. Among the heavy consumers of peaches during the season are the canners. industry uses annually many thousand baskets of choice fruit. In Baltimore the canners are the principal buyers in the market; but after all the great bulk of peaches are eaten from the hand. And in past seasons it has been found that, however great the supply of good peaches was, there was always demand enough for them to effect sales at some price or other, of all that were offered on the mar-And it has been only the poor and worthless fruit which has been thrown away.

The culture of small fruit and vegetables is rapidly spreading on the Eastern Shore, the soil and climate of which are specially adapted to their successful production. With the constantly increasing facilities for reaching markets, and the steady accession of new population with the important resources of cash capital, energy, enterprise and the knowledge of new methods and appliances, the Eastern Shore counties are pushing forward with remarkable rapidity, and as there is very little waste and unimprovable land they promise to become very soon a vast garden spot for the cultivation mainly of fruits and vegetables, although the

growing of grain and raising of live stock will continue to be important features of the peninsular husbandry for many years. The Eastern Shore is already well known to stock raisers for its fine herds of blooded cattle, its fast horses, its flocks of choice Southdown, Cotswold and Shropshire sheep, as well as for its delicious peaches and smaller fruits. The great variety of its products, in fact, and the remarkable recuperative qualities of its soil, under judicious treatment, afford the best gurantee of its future prosperity.

There is a large quantity of fruit brandy manufactured on the Eastern Shore. The following figures for the fifteenth internal revenue division of the district of Maryland, comprising the Eastern Shore of Maryland and Eastern Shore of Virginia counties, are from an official source:

Counties,	NUMBER OF	PRODUCT IN
Kent, Md	ı	59
Caroline, Md	2	1,452
Talbot, Md	1	925
Dorchester, Md	9	3,841
Wicomico, Md	. 9	2,915
Somerset, Md	2	196
Worcester, Md	1	105
Accomac, Va	1	97
Total	26	9,590

Of which about 200 gallons is peach brandy and the rest apple brandy. The United States tax on this distillery product at ninety cents a gallon, is \$8,631.

CECIL COUNTY.

Cecil county, the northernmost of the Eastern Shore counties, is bounded on the north by Pennsylvania, on the east by Delaware, on the south by Kent county, and on the west by Chesapeake bay and by the Susquehanna river, which separate it from Harford county. The population in 1890 was 25,851, divided as follows: White, 21,850; colored, 3,978.

Ceeil county contains 375 square miles, and the property of all kinds is assessed at \$13,389,101. The county tax rate is 63 cents on the \$100. The soil of the county includes almost every variety. The first district, Sassafras Neck, is chiefly a sandy loam, capable of being brought to the highest state of productiveness. Many, if not all the farms, are now in a fine condition, producing large crops of wheat, corn, oats and elover. It has not been found well adapted to timothy, or at least but little attention is paid to timothy hay in that district. Some of the lands, composed largely of clay, grow well the natural grasses and are excellent pasture fields. This is the great peach-growing district of the county. The second district is much like the other. It includes the historic Bohemia Manor, which is called by some the garden spot of the county. The eapabilities of most of the acreage of these districts have never been tested. They could be made to grow everything that can be grown in this latitude. A well-informed gentleman of Cecil county says he does not hesitate to state that finer lands are not to be found in the Middle States. The third or Elkton district embraces a greater variety of soil than either of the other districts named. It runs from a rich loam to an almost worthless clay or gravel. Grain, clover and timothy are raised and many cattle fattened on its fine pasture lands. The fourth, sixth, seventh, eighth and ninth districts are perhaps in a far higher state of improvement than the lower districts. The farms are smaller and the farmers practical

men of superior intelligence as farmers. From these districts the Baltimore market is supplied with its well-known "Cecil county hay." There are fine dwellings in both the upper and lower districts of the county, and fine, large barns, especially in the former. Churches and schools afford every facility for religious and secular improvement. The fifth or Northeast district, the largest district in acreage, is inferior as an agricultural country, containing a large acreage of barrens. Many of its farms along the Northeast and Elk rivers are fine grain and truck land.

Tobacco is cultivated to a small extent in the upper districts, and could be produced in large quantities.

There is considerable unimproved land in the county, which can be purchased at low figures, and give good opportunities to poor but industrious immigrants. The transportation facilities are good. The Philadelphia, Wilmington and Baltimore Railroad, and the Philadelphia extension of the Baltimore and Ohio, pass through the county from west to east. The Columbia and Port Deposit and Baltimore Central traverse some of the upper districts. Farmers in the lower districts ship some by the Delaware Railroad, which is within a few miles of the county. The Chesapeake and Delaware Canal, and Elk, Northeast, Sassafras and Bohemia rivers are also used extensively in transportation.

The manufactures of Cecil represent considerable capital and interests. The rolling mills and forges of the McCullough Iron Company at Northeast, West Amwell and Rowlandsville employ several hundred men. George P. Whitaker has a blast furnace on Principio creek. The census of 1880, gave the amount invested in these iron manufactories as \$550,000. Paper manufacturing is also an old industry of Cecil. Wm. M. Singerly's Record paper mills at Elkton, are an important industry to the town.

Mr. Singerly bought the Providence Paper Mills in 1880 and built extensive pulp works in Elkton in 1883. In the

pulp works one hundred and twenty men are employed and sixty at the paper mills. At the latter 25,000 pounds of pulp are made per day, and 20,000 pounds of paper are made at the other. Both works run night and day. Contracts are also filled for government paper. George W. Child's Marley Paper Mills, which furnishes the Philadelpha *Ledger* with paper, employs about 40 or 50 hands. Harlin & Bros. munufacture book-binders' pasteboard. Paper is also manufactured at the Cecil Mills, on the Octoraro river.

The Scott Fertilizer Company, at Elkton employs many hands. The Waring Fertilizer Company has works at Colora, and the Eureka at Frenchtown.

The Stone quarries at Port Deposit are an important industry. McClennahan Bros., at that place, employ from 150 to 200 men, and Port Deposit stone goes to all parts of the country. B. C. Bibb & Son manufacture stoves, and Reynolds Brothers manufacture tin cans at Port Deposit. There are fire-brick, kaolin and pottery manufactories at Northeast. The population of this town is 1,249, an increase of 26.42 per cent., since the census of 1880. Two brick manufactories, the Elkton Foundry and Enterprise Machine Works, are at Elkton. There are many flouring mills in the county, some of which have the roller process. The Elk Mills, the only cotton manufactory in Cecil county, which have been closed for many months, were leased some time since by M. Gambrill & Co.

The farmers of the county are replacing old machines with improved new ones, several dealers doing a large business in farming machinery.

The live stock of the county has been improved during the past few years, doubtless caused greatly by competition for honors at the Cecil fair.

Elkton the county seat, has a population of 2,318, and has advanced 32.31 per. cent., since the census of 1880. Many

new dwellings have been erected or are in course of erection. A competent gentleman estimates the annual mercantile business of the town at \$600,000. A business man of Cheapeake City estimates the business of that town at \$400,000. It has a population of 1,155. Large business is also done at Port Deposit, Northeast and Rising Sun. There is land in the county valued at \$100 per acre, and other land which can be purchased for \$5.00 per acre. One of the greatest industries of Cecil county is the shad and herring fisheries on the Susquehanna, Northeast and Elk rivers.

KENT COUNTY.

Kent county to-day stands in the very front rank of Maryland counties, and it is safe to say that the most beautiful and productive section of the celebrated Cumberland Valley cannot surpass the high state of cultivation or productiveness shown by the results secured to the Kent county farmer. All progressive measures along the line of agriculture or horticulture have always found a ready lodgment in Kent county soil, and have flourished and brought forth fruit until superseded by some more advanced and better systems. The Grange has done a good work, and farmers' clubs, peach growers' associations and similar organizations having in view some specific object, are all in active operation. The Still Pond Farmers' Club is one of the most aggressive organizations of the kind in the State, has a large membership, and continues to achieve magnificent results along the line of agricultural and horticultural investigations and experiments. The disposition of the farming community throughout the county to adopt more improved methods and advanced ideas in the cultivation of the soil has had a good effect, and a speaker at a recent meeting of farmers declared that by the adoption of scientific and still higher principles of fertilization and cultivation, it is believed that the productiveness of these already fertile lands may be doubled.

- The surface of the county is beautifully undulating or rolling, while the soil, though varied, is, for the most part, of a dark loam, fertile, warm and easily worked. Underlying this is a rich and deep clay subsoil, making geological conditions calculated to produce the most satisfactory results.

Though, as a rule, the county is in a high state of cultivation and the land commands correspondingly good prices, yet there are many acres possessing all desirable qualities which have not as yet been so highly improved or developed, which invite the immigrant, offering a pleasant home and abundant and speedy returns for his labors. Under the financial depression which has existed during the several years past, lands which at one time sold for from one hundred to one hundred and twenty-five dollars an acre, may now be bought at a much lower figure. The scale of prices for lands in the county might be put: Eighty or eighty-five dollars for the best and twenty dollars per acre for the lowest, grading from that up according to quality, improvement and location.

The soil is adapted to the cultivation of the cereals, fruits and grass, thus offering advantages to the agriculturist, horticulturist, trucker or stock raiser. It is claimed that under the impetus and stimulus given by the introduction of creameries, the value of stock in the county has more than doubled within the past five years, thus placing the county as one of the first cattle-producing sections in the State.

The climate is delightful and healthful, the thermometer rarely ever reaches 96° in mid-summer, or falling below 10° during the winter months. Fever and ague are almost things of the past, and low fatal fevers are not more common than in the most heathful sections of the State. Contagious diseases of a malignant form and epidemics are almost unknown.

The public school system of the county, it is safe to say, is not surpassed by any county in the State, the school-houses being conveniently located and the schools taught by a most thorough and efficient corps of teachers.

Nearly every religious denomination is represented in the population, and Catholic, Methodist Episcopal, Protestant Episcopal, Methodist Protestant and Presbyterian churches are found at convenient distances throughout the county.

That unchanging hospitality and sincerity of social relations which is a characteristic of the entire Eastern Shore of Maryland is developed here to a prominent degree; the stranger may rest assured of a kindly welcome and thoughtful consderation when he crosses the boarders of this county. Fine water power is afforded for milling purposes in various sections, and all of the coarser bread material, and much of the finest patent-roller process flour, are turned out by fine mills located on natural streams.

Though particularly adapted to agriculture, the lands of Kent have been found to be all that could be desired for a successful cultivation of the peach, pear and all of the more profitable small fruits; indeed, it might be said that this county is now, and has been for years past, the great peach garden of the Maryland and Delaware peach belt, the county furnishing nearly two millions of packages of peaches alone to the markets of the world during the season of 1891. —

Situated as it is, with the Chesepeake bay sweeping its western borders, the Sassafras and Chester rivers forming its northern and southern boundaries, it is protected, to a great extent, from the destructive effects of frost. The peach has absorbed, in a greater measure possibly than any other crop, the attention of the people, and vast tracts of the most fertile lands of the county are in peach orchards, stretching away miles in length. All of the Maryland fruits are largely cultivated, and form sources of extensive revenue.

As a section having an enviable record for large yields of corn and wheat, this county stands second to none in the State, her best lands yielding from forty to forty-five, and as high as forty-seven bushels of wheat per acre, with a minimum yield in exceptional instances of twelve bushels. The corn crop runs as high as eighty and as low as twenty bushels per acre. Many farmers have devoted much attention to grass, and with the introduction of vast creamery and dairy interests in nearly every district, it has been clearly demonstrated that the lands are capable of magnificent possibilities in the direction of growing grass. Already the products of the dairy have become sources of great wealth to the farmer. In addition to this, it has resulted in the introduction of superior grades of dairy cattle, and it may be doubted whether any county in the State can show finer herds of thoroughbred Holstein and other high bred stock. Indeed, stock raising has become an important and profitable industry, which, with its dairy profits, stand second only to the cultivation of grain and fruit.

The question which naturally presents itself is: What cause to a greater extent than any other has been conducive to this high state of general agricultural development? The answer is given—accessibility to market, an abundance of good labor and excellent transportation facilities. Thereis scarcely any section of the county which is further than a thirty or forty minutes' drive from either rail or water. During the summer months seven steamboat lines touch the county daily, and during the heavy freighting seasons, extra boats are frequently put on to meet the demands. The Baltimore and Delaware Bay Railroad traverses almost the entire length of the county, while a branch of the Pennsylvania Road touches at Millington and Massey's, on the northeastern border. Scarcely less than twenty sail vessels ply constantly between the rivers and Baltimore city. What county can show a more extended array of commercial facilities? By rail, Kent is brought within two hours of

Wilmington, two and a-half or three hours of Philadelphia, four hours of New York, bring her into accessibility of the great markets of the west and northwest. Baltimore is but two hours from some sections and within a five hours' run by steamer from her farthest points. Her river and bay frontage offer excellent ports.

Having one of the most extended water-fronts of any county in the State, it may readily be seen that the oyster and fish interests are valuable. Thousands of the population live exclusively from the products of the water, and several comfortable and beautiful villages have sprung up on the shore contiguous to the vast oyster fields along the bay. The rivers teem with fish and oysters. Swan and wild geese and the canvas-back, red-head, black-head and other choice varieties of ducks are numerous on the waters, while excellent gunning is found in the interior of the county.

The area of the county is 315 square miles. The census of 1890, gave the county a population of 17,471, divided as follows: white, 10,416, colored, 7,055.

Chestertown the county seat, is a prosperous town of 2,632 inhabitants, and is situated on Chester river, about thirty miles from its mouth. Here is an excellent harbor, extended wharf front, and navigable water sufficient for steamers and the larger class of sailing vessels. The town is alive to the spirit of enterprise. A board of trade has been formed, and special inducements in the matter of free sites, exemption from taxation and other advantages are offered to manufactures settling within her limits. The manufactories already in operation are the extensive plant of the American Strawboard Company; the large paper-basket works, under the same corporation, both plants being valued at several hundred thousand dollars; an ice-factory, creamery, a new patent process roller flouring mill extensive brick works, several phosphate factories, plan?

ing and sawmill, sash and door factory, foundry, wagon and carriage works. It has two banks, two newspapers, four churches, an excellant public school, and one of the finest water supplies in the State.

Washington College, one of the oldest and most efficient educational institutions in the State, is also situated here. The surrounding country is fertile and beautiful, while, socially, Chestertown is, like the entire county, characterized by that genial hospitality which reigns as a most striking feature of the social life.

The biographical history of Kent bears some of the most prominent names of the State, namely: The Pearces, Vickers, Ringgold, Hanson, Raisin, Wilkins, Wroth and many others.

Kent may challenge any county in the State to offer greater inducements to the immigrant, the manufacturer or the investor. Rich in her natural resources of soil, climate, location and general healthfulness. Kent invites all to share her blessings and advantages. A land of splendid opportunities, she offers a home alike to the poor but honest immigrant, the manufacturer or the retired merchant or man of business in quest of a home.

QUEEN ANNE'S COUNTY.

Of the nine counties embraced in what is called the "Eastern Shore," none offer greater attractions to the agriculturist, the capitalist or the pleasure-seeker, than Queen Anne's. With a most delightful climate, a soil that yields almost anything that the farmer asks from it, her rivers and bay abounding in oysters, fish, crabs and "diamond back" terrapin, her shores alive with wild geese, ducks and swan, she is a very paradise of the sportsman, and with her fields of golden grain and luscious fruits, offers to capitalists every inducement for investment.

Occupying an almost central position in the tier of counties lying between Chesapeake bay and the Atlantic, Queen

Anne's is situated upon Chester river, a broad, bold stream, and is also washed by the waters of Wye river and Eastern bay, while Corsica river divides it. These waterways furnish most favorable means of transportation, and steamboats utilize them to the fullest extent, while lines of schooners and other craft are constantly in motion, transporting her grain and other products to Baltimore and elsewhere, or bringing return cargoes of merchandise and other domestic supplies to her shores.

While some portions of her land are flat—notably the river bottoms—yet very much of it is high, and wonderfully adapted to the needs of the farmer. The higher lands are of a rich loam with clay sub-soil—very fertile and easy of cultivation—while the bottoms are of a stiffer quality, heavily topped with rich alluvial deposits.

Fewer sections of the country produce finer crops of wheat and corn than Queen Anne's, the average yield of wheat being from eighteen to twenty-two bushels per acre, though at times and in certain favored localities, over forty bushels per acre have been harvested and housed, weighing sixty-two pounds per bushel. The average of corn is about fifty bushels per acre, but many farms far exceed this amount, and the nearness to market and cheap transportation enable the farmers to favorably compete even with the great West. Splendid crops of timothy and clover are grown all over the county, adding another to the many attractions offered the farmer seeking a home, clover being one of the best fertilizers, and furnishing one among the best pasturages for stock of all kinds.

Kent Island, an important part of this county (known at home as Little Britian), is a rich and fertile section, nothing behind the rest of the county in its yields of cereals and other crops. Being surrounded by water—by the bay in parts, and by Chester river in another direction—she is the natural dwelling-place of oysters, terrapin and game of

every description, all of which add largely to her wealth, besides offering to the sportsman an introduction to the home of the wild goose, duck and swan, and to the epicure or gourmand the most toothsome of delicacies. A dish of terrapin, prepared as only an Eastern Shore "auntie" can, would tempt the soul of an anchorite.

Among Queen Anne's chiefest productions outside of cereals, are peaches, pears and small fruits, that find ready and remunerative sale in Baltimore, Philadelphia, New York and Boston, and even as far west as Chicago and other points. There was shipped from this county during the year 1891, some 100,000 baskets and boxes of peaches; 20,000 baskets of pears, 5,000 crates of strawberries and blackberries, while thousands of bushels of apples were left to rot in the orchards or to be eaten by the hogs, because the farmers were so overwhelmed with the production of other things that they could not care for them.

The people are a sturdy race, honest, industrious, progressive and hospitable, always glad to welcome strangers, especially those coming among them seeking homes. They are good farmers, understanding the demands of their lands, and ready and willing to meet them, as their well-cultivated fields and charming homes abundantly testify.

Schools and churches of all denominations shed their benefits over the land, the school system being unsurpassed and under the direction of most efficient teachers. There is no excuse for any one living in ignorance in this favored county. The colored population, of whom there is a large percentage, have the same advantages as their white neighbors enjoy, and, for the most part, lead happy, contented lives, always striving to elevate their race. This portion of the community furnishes the greater part of the labor required for the cultivation of soil.

The tax rate has advanced within the year 1891, owing to the large outlay in buying the Chester river bridge at Chestertown, in order that it might forever be a free highway, and building new and repairing old bridges throughout the county. But with all this to meet, the rate is only ninety-three cents on the \$100. The total assessable property in the county is \$7,300,397.

The area of the county is 352 square miles, and according to the census of 1890, it has a population of 18,461, divided as follows: whites, 11,816; colored, 6,645.

Queen Anne's County is proverbially healthy. There have been no epidemics, no local diseases, fever and ague having been completely eradicated by a general system of drainage, and a thorough, clean cultivation of lands.

The climate is simply delightful, neither bitterly cold in winter nor intensely hot in summer; neither do the people suffer from those fearful storms of wind that embitter life and are so destructive to property in many other sections, the position between the bay and the ocean seeming to act as a sort of anodyne upon the furies of the storms.

The prices of land range from \$15 to \$75 per acre, the latter price being only demanded for land in the highest state of cultivation, or occupying an enchanting position on the water, and with correspondingly handsome improvements, while the cheap lands, as they are esteemed when held at the very low figure of \$15 to \$20, are those that have been neglected, and, from want of care and incessant wretched cultivation, allowed to go behind, and thus depreciate in value. Yet, these low-priced lands, in the hands of a good farmer having some means to expend in their redemption, soon respond to kind attention, and rapidly enhance in value, until they reach the summit in price. This has been thoroughly demonstrated and exemplified through the two largest farmers in the county, Gen. Wm. McKenney and Senator John B. Brown.

If a capitalist from any section is seeking a remunerative investment or a summer home for his family, then no sec-

tion offers superior inducements to Queen Anne's County. All that she lacks is manufactories, and she presents advantages for this character of industries rarely excelled. Nearly every farm on the bay and rivers has sufficient depth of water for any sea-going craft to find a landing, many of them having private wharves or piers; and her proximity to the great business centers, being only a few hours' ride by water or rail from Baltimore, Philadelphia, or New York, with the cheapest transportation that can be devised, should surely attract the attention of capital and enterprise.

Centreville, the shire town, comprising a population of 1,309 citizens, is situated near the head of Corsica river, upon a beautiful elevation some two hundred or three hundred feet above sea level, and about a half a mile from the steamboat wharf, and is one of the prettiest villages to be found anywhere. It has three weekly newspapers, two national banks, a large hotel, churches of nearly every denomination, a high school for girls and an academy for boys, both in charge of efficient teachers and belonging to the free school system. The people are refined and cultivated, still clinging to the simple, unalloyed habits and customs of the palmy days of their sires. Church Hill, Sudlersville and Queenstown are also prosperous towns, and there are a number of a smaller villages.

CAROLINE COUNTY.

Probably no county in the State has improved more rapidly during the past two decades than Caroline, the inland county of the Eastern Shore. Caroline county is bounded on the north by Queen Anne's, on the east by Delaware, on the south by Dorchester, and on the west by Talbot and Queen Anne's. It is watered by the Choptank and tributary streams. Denton, the county seat, is on the Choptank, at the head of steamboat navigation. The soil varies from sandy loam to heavy "white oak." The former is confined principally to the east side of the Choptank river,

extending from one-fourth of a mile to two miles from the stream. This sandy land is admirably adapted to the production of vegetables and small fruits, when properly enriched and managed. These crops in many cases have been found much more lucrative than the wheat crops of the heavy clay land. The heavier grades of soil are not excelled for the growing of wheat and corn. As much as forty-eight bushels of wheat per acre has been harvested from the famous Tuckahoe Neck, a fertile tract of about fifteen square miles, lying between the Choptank and Tuckahoe rivers, and on the south side of the county road leading from Denton to Hillsboro. Condition and situation govern the price of land in this county, running from \$5 to \$75 per acre. Land has of late years materially increased in value, though good light land can still be bought for from \$10 to \$15 per acre. Wheat, rye, oats, corn and hay are the principal farm crops, while fruit in variety, such as peaches, apples, pears, plums, cherries, grapes, raspberries, blackberries, strawberries, &c., are grown. Peaches and small fruits reach a perfection here and in the lower part of the peninsula that has made the region famous. Outside or sweet potatoes, vegetables are not yet extensively grown for market, but the earliness with which nearly all kinds of garden vegetables can be grown on the lighter soils is beginning to receive consideration. This, coupled with the fact of having ample transportation facilities with the great eastern cities, via the Delaware Railroad sytem and steamboats from Denton to Baltimore, will in the near future develop this interest to the extent it deserves. From a good portion of these light lands there is daily communication by three rival lines of steamers to the metropolis of the State, while the northern and southern parts of the county each have railroad facilities for placing their products in a few hours in the markets of Philadelphia, New York and Boston.

Improved farm machinery has within the last decade annihilated the more primitive appliances in that relation,

while farm stock of all kinds has received its full and just measure of attention. There has been a steady tide of immigration from Northern States into Caroline county since the war, but there is room for many more settlers.

The manufactures of Caroline county, except the extensive canning interests, are meagre.

The burning of charcoal is an industry in the lower part of the county, and the pine forests north of Federalsburgh have yielded many tons of the product, and from the ground thus cleared farms have sprung as if by magic. A kindlingwood factory, affording employment for several scores of persons, has for some time been in successful operation at Federalsburgh. Roller mills for the manufacture of the patent process flour have also been recently built at Denton. They have a grinding capacity of 65 barrels of flour daily.

By far the leading industry of the county is its extensive fruit-packing interest. The pioneers in this enterprise are A. B. Roe and Joseph H. Bernard. Both have been eminently successful, and of late years their establishments have packed jointly nearly one million cans per year. Other canneries have since started at Greensboro, Marydel, Bethlehem, Choptank and American Corner. Peaches and tomatoes are the staples, and many acres are devoted to growing the latter, the packers paying \$6 per ton for them. Whortleberries, corn, peas and pears, are also canned successfully. These houses give employment to about 1,500 persons.

Fruit-evaporating is also an important industry, and many hundred pounds of fruit are annually produced from evaporators that stand near almost every large orchard, to use the fruit when prices are too low for shipping. The retail mercantile business of the county amounts to almost \$1,000,000 per annum. Of this the business of each of the towns of Greensboro, Denton, Hillsboro and Federalsburg amounts to \$100,000 yearly. Northern immigration has greatly aided the progress of the county, and some of these immigrants are among the most successful farmers and mer-

chants. The mild climate, cheap lands and the ease with which these can be cultivated are still drawing settlers from Pennsylvania, New York, the New England States, and even Canada.

The population of Caroline county, according to the census of 1890, was 13,903, divided as follows: White, 10,008; colored, 3,895. The area of the county is 315 square miles.

TALBOT COUNTY.

Talbot is the most central of the nine counties of the Eastern Shore. It is bounded on three sides by navigable salt water. The rivers, creeks and estuaries tributary to the Chesapeake and Eastern Bavs penetrate every section of the county, and there is not a farm even in the "interior" over three miles from navigation. Its area is 285 square miles. The Delaware and Chesapeake Railroad, steamboat lines on the Choptank, Third Haven, Tuckahoe, Miles and Wye rivers and the Eastern Bay, and sailing vessels on all the waters furnish transportation facilities. The soil is principally a red clay loam in the northern and western parts of the county, and a white oak in the salt water sections. Farm lands are worth from \$25 to \$125 an acre, according to location and condition of improvement. The cereals, hay, peaches and other orchard fruits, with small fruits, berries, and vegetables, are the products. Large yields of all these products are raised in Talbot. At present, fruit-growing and truck culture are receiving much attention, and are becoming very profitable.

Talbot farmers keep up with the times in the use of all the improved farm implements and machinery, and new inventions or improvements are given practical trial here as soon as anywhere else in the country. Stock-raising, including horses, cattle, sheep, and swine, receive particular attention, several Talbot farmers being importers and breeders on a large scale.

Talbot is deficient in manufactures. There are a straw-board paper mill, two flour mills, two fertilizer factories, a planing-mill, a brick and tile yard, a broom factory and a basket factory at Easton; a ship-yard at Oxford, and three at St. Michael's; fruit and oyster canneries at St. Michael's and Oxford; large lumber and planing mills at Tunis' Mills, and smaller ones elsewhere; a brickyard at St. Michael's, and also at Oxford, and grist mills in various sections. It is believed there are peculiar advantages in the county for the establishment of woolen mills, flour mills on a large scale, an agricultural implement factory and other industries.

The population of Talbot county by the census of 1890 was white 12,148; colored 7,587; total 19,736.

Talbot has for several years been an attractive section to immigrants. The climate, the soil, the character of the people, its splendid schools and numerous churches, its transportation facilities, its accessibility to New York, Philadelphia, Baltimore and Washington, its healthfulness, are amongst its advantages, and in its population of independent, thrifty and prosperous citizens are many who have come to Talbot from other States and countries since 1870.

The incorporated towns are Easton, population 2,939, St. Michael's, population 1,329, Trappe and Oxford, with a population of 1305. Cordova, Royal Oak, Tunis' Mills, Hambleton, Wittman, Longwood, Matthews, McDaniel, Wye Mills, Skipton, Sherwood and Island City, are thriving villages. Easton has a business ranging from a million to a million and a half dollars annually, and has some of the handsomest and largest stores and other business establishments to be found on the peninsula. The area of country trade that seeks Easton is very large, embracing all of Talbot, a large portion of Caroline, and parts of Dorchester and Queen Anne's counties. Oxford and St. Michael's, with their shipyards and railways and large oyster and crop industries and mercantile trade, are prosperous towns when "times are good;" but being situated on peninsulas, with no back country, and with facilities that make it almost as easy to go to the city to do shopping as to do it in town, the mercantile business is restricted in both these towns. Trappe has a large and wealthy section of farming country to draw from, and can show a business of \$150,000 a year.

DORCHESTER COUNTY.

Dorchester county has an area of 610 square miles, and is bounded on the north by Caroline county and the Choptank river, which separates it from Talbot county, on the east by Delaware and the Nanticoke river, separating it from Wicomico, on the south by the waters of Somerset county, and on the west by the Chesapeake bay. According to the census of 1890 the population was 24,843, divided as follows: white, 16,035; colored, 8,808.

The soil varies from stiff clay to sand and black loam. The surface is generally level, but easy of drainage, and in the northern sections is somewhat undulating, giving rise to some water-power, which is utilized for saw and gristmill purposes. Marl is found in large quantities, possessing excellent fertilizing qualities. The price of land varies, according to the location, from \$5 to \$50 per acre, the average price about \$25. The staples are wheat and corn, but oats, rye, potatoes, and the choicest fruits and berries are also produced in large quantities, and find a ready market by steamers to Baltimore, and by rail to Philadelphia, New York and other Northern and Western markets. The facilities for transportation are unexcelled. The county can be almost circumnavigated, and is also cut up with many inlets and creeks, where the luxuries of the water, with wild fowl abound, making many desirable water-sites, and affording to a large majority the means of transportation by steamer and sailing packets, almost at the farmers' doors. Two daily lines of steamers to and from Baltimore—the Maryland Steamboat Company and the Choptank Steamboat Company-touch at points bordering the Choptank. On the Little Choptank, which traverses a

fertile and prosperous section, a different line of steamers to and from Baltimore also plies, while the Nanticoke river, which forms the dividing line between Dorchester and Wicomico, also furnishes excellent steam transportation for freight and passengers through the steamers of the Nanticoke Steamboat Company. The northern section of the county is penetrated by the Cambridge and Seaford Railroad, which connects at Seaford with the Delaware Road. The character of the soil is so diversified that it is capable of producing any and all classes of produce, but is more especially adapted to trucking. Within the past few years Dorchester county has largely improved in its methods of farming by the introduction of machinery. Great interest is manifested in stock-raising, and the grade of stock has increased 100 per cent.

The manufacturing interests are as yet limited, but increasing. The facilities are inviting. Canning oysters, fruits and vegetables are carried on at Cambridge, Vienna, East New Market, Secretary, and at other points. Cambridge is the largest town on the Eastern Shore, and the most prosperous. According to the census of 1890, it contained 4,192 persons, an increase of 1,930 over the census of 1880, or more than 85 per cent. At Cambridge there are several phosphate factories and a large flouring and hominy mills. At Cambridge and other points there are large quantities of oak, pine and hickory timber. Shipbuilding is also carried on. The general mercantile business transacted in the several towns of Dorchester county will amount by estimate to \$2,225,000. The inducements for industrious immigrants are most excellent. The oyster interests conflict greatly with farming on account of scarcity of labor, caused by the more lucrative employment to be obtained during part of the year in the oyster trade. There are many acres of languishing land which could be purchased at a cheap price and made to yield abundant crops. The people are genial and hospitable, and there is a liberal provision of schools and churches of various denominations. The climate is healthy.

WICOMICO COUNTY.

Wicomico county, in the southern part of the Eastern Shore, is contiguous to Dorchester county on the north and west, the State of Delaware on the north; Worcester county on the east, and Somerset county on the south. Its area is 369 square miles. The soil is of great variety. In that portion of the county bounded by the Pocomoke river on the east and the Delaware line on the north and northeast, a black loam soil is found, which is the most productive corn and oat land in the county. In the sections bordering on the Wicomico and Pocomoke Railroad, where the land is higher, grass is grown abundantly and in dry seasons the strawberry crop is large.

In the western section of the county, composed of Salis bury, Quantico, Tyaskin, Barren Creek and Sharptown districts, bounded by the Wicomico and Nanticoke rivers, the soil is greatly diversified. From the town of Salisbury to Rockawalking, and from that point on a line running north and south to the two rivers, the lands are elevated, the soil of a light sandy loam, and for early vegetables, small fruits and peaches, this section has not its equal for production on the peninsula. Wheat is also grown here with some success, as much as 20 and 25 bushels per acre being raised by progressive farmers, and the melon crop is extensive.

The land southwest of Rockawalking, taking in Quantico district and a part of Tyaskin, is stiff, of white and red clay, well adapted to corn, wheat, oats, grasses and anything that a stiff soil will produce. The wheat and clover fields in this section will compare favorably with those of any of the upper counties. Peaches, strawberries, raspberries, blackberries and peas are now being raised extensively and successfully.

In those parts of Tyaskin, Quantico, Barren Creek and Sharptown districts, bordering on Nanticoke river, where land is light, watermelons are the most profitable crop. More than one million melons are shipped from this section annually to Baltimore and Northern markets. Land in the sections described ranges in price from \$10 to \$50 per acre, depending entirely on the state of improvements and proximity to shipping points.

Sharptown, Riverton, Barren Creek, Quantico, Tyaskin and Nanticoke, towns in the western part of the county, depend largely for transportation on steamboats and vessels. The largest part of the perishable fruit raised, however, in the vicinity of some of these towns, is hauled to Salisbury or Delmar, a distance of ten or twelve miles, to be shipped by rail to Northern markets via N. Y., P. and N. Railroad, and the P. and D. Railroad. The steamer Enoch Pratt, Maryland Steamboat Company, trades on the Wicomico river between Salisbury and Baltimore. The farmers on both sides of this river, below Salisbury, ship their fruit by this route to Baltimore. Transportation facilities for the eastern part of the county are supplied by the N. Y., P. and N. Railroad, and also by the Wicomico and Pocomoke Perishable fruit is shipped exclusively to the big northern markets. The necessity for improved farm machinery is beginning to be generally felt, and the latest implements are being rapidly introduced.

The principal manufacturing industry of the county is the lumber business. About 14,000,000 feet of planed lumber is manufactured annually. Of this quantity Salisbury has nearly 8,000,000. Independent of this, the firm of E. E. Jackson & Co. uses between 8,000,000 and 9,000,000 feet of Virginia boards for making oil cases. A large quantity of the home-made lumber is utilized by different factories in manufacturing peach baskets and strawberry crates and boxes. This business is growing extensively, and nearly every town has its factory.

There are large quantities, and it may be an inexhaustible supply, of bog iron ore, just above Barren Creek Springs,

that awaits enterprise and capital for their development. On the streams are several mills, with an adequate supply of water for many manufacturing purposes.

Salisbury, the county seat, is one of the most flourishing and enterprising towns on the peninsula. Although nearly destroyed by fire several years ago, it has been almost entirely rebuilt and improved in appearance. The annual volume of its mercantile business is estimated at \$1,000,000. There are also a number of other prosperous towns, and the county is progressing in all directions. In the variety of its soil, mildness of climate, excellent facilities of transportation, and cheapness of unimproved lands, Wicomico offers special inducements to immigrants. The population of Salisbury is 2,905, an increase of 12.55 per cent. over the census of 1880. The population of the county, according to the census of 1890, was 19,930, divided as follows: Whites, 14,600; colored, 5,330.

SOMERSET COUNTY.

Somerset county is the southernmost county of the Eastern Shore. It is bounded on the north by Wicomico, on the east by Wicomico and Worcester, on the south by Pocomoke river and sound, and on the west by Chesapeake bay. The area, including islands, is 526 square miles. The system of farming in Somerset county has, in the last ten years, undergone many changes, and the great wheat harvest, which in other days was the busiest season of the year, has, to a large extent, given place to what is commonly called the trucking season, when the strawberries, peas, wax-beans, potatoes, etc., follow each other in quick succession to market. With these developments, new opportunities are offered to the man of moderate means and small quantities of land, to make farming profitable. Being the southernmost county of the Eastern Shore, the mild climate and soils are well adapted to fruit growing and trucking; this branch of farming has grown to large propor-

tions. In 1858 a two-horse wagon would convey at a single load all the fruits and vegetables shipped to the market each day from Somerset. Now the shipments reach seventyfive carloads per day in the heavy part of the season. enables the large landholder to diversify his crops, and the smaller ones to make farming profitable. Strawberries make the most important of all the crops, known as trucking crops, the average of the crop per acre being about \$150, clear of gathering and marketing, in a favorable year. The soil, being mostly of the pipe-clay, and the loose black kind, with some mixture of red clay, is specially adapted to the growth of such produce. Land can be purchased at almost any price from \$10 to \$50 per acre, according to location, improvements and the state of cultivation. The soil is also adapted to the growth of hay, and this branch of farming, though much neglected, could be made profitable. The cleared lands are capable of being divided into smaller farms to advantage, and woodland abounds that can be purchased at reasonably small sums and easily reduced to a good state of cultivation, thus affording opportunities to industrious immigrants that are perhaps unknown to many who seek more distant fields of labor. The canning industry in the county is quite an important item to farmers near the packinghouses, of which there are several in the county. The pack of the county is about half a million cans of peaches, tomatoes, berries, &c., but principally tomatoes. There are two roller flour mills, one at Princess Anne, the other at West-These, with several steam saw-mills, are the principal manufacturing industries.

There are many peach orchards in the county. The trees grow splendidly on the red clay and sandy loam soils, and bear fine fruit. The opinion with Delaware peach-growers is gaining strength that the peach section is fast moving down the peninsula. The death of trees by yellows, and vast quantities of premature fruit in many orchards in Delaware appears to support the opinion. The Gulf stream

by its approach here to the land, the isothermal line falling a few miles south of Crisfield, situated in the southernmost part of the county, renders the climate mild in winter, softens the breezes of summer, and occasions the best climatic condition for the early vigorous growth of fruits and vegetables.

The several rivers and creeks and the Tangier Sound, where the finest oysters grow, afford ample water transportation to Baltimore by steamers and sailing vessels, having the Eastern Shore Steamboat Company from Crisfield, the Maryland Steamboat Company from Salisbury, and the Manokin River Steamboat Company from Princess Anne. The county has unsurpassed transportation facilities by the New York, Philadelphia and Norfolk Railroad to northern and western markets.

It may be safely said that nowhere in the rural districts of Maryland is labor better rewarded than throughout Somerset county. In winter the various branches of the ovster trade give employment to hundreds who would otherwise be without work, and in summer the crabbing interest has grown to be an industry that will almost rival the oyster trade in profit, while during the strawberry season a sufficient number of laborers cannot be secured from the county's borders to reap the crop, and hundreds are brought from Virginia and adjoining counties, and receive good wages. An excellent feature of this kind of labor also is that it is distributed among all classes, and every man, woman and child get their respective share of the profits. From present indications it would seem that Somerset county is destined to have a large acreage of vegetable and fruit-producing gardens, and when this is accomplished, and the vast resources which nature has furnished in the oyster bottom which lines the county's shores have been properly and judiciously cultivated, there is no reason why Somerset should not be one of the most progressive counties in the State. The principal towns are Princess Anne, the county seat, and Crisfield, which in recent years has become an important depot of the oyster trade. According to the census of 1890, Crisfield has a census of 1,565, an increase of 58.72 per cent., since the census of 1880. According to the census of 1890 the population of the county was 24,155 divided as follows: white, 14,502; colored, 9,653.

WORCESTER COUNTY.

Woreester county, in the extreme southeastern portion of the Eastern Shore, is the only county in Maryland that borders on the Atlantic, and contains Maryland's only seaside. Its area is 475 square miles. The soil is greatly diversified, varying from the unproductive to that which is very fertile. Generally, however, if not naturally fertile, it is of a character easily made susceptible of improvement and a high degree of productiveness. Some sections, notably those near the borders of the Poeomoke river, which runs through the length of the county, and also the newly cleared swamp lands, often yield from 50 to 100 bushels of corn per acre. The most valuable lands, perhaps are those with a surface of light loam and red clay subsoil, which occupy the largest area. This kind of soil is entirely destitute of rocks, easily cultivated, yielding, with the application of barnyard manure, compost, or some commercial fertilizer, remunerative crops of cereals, and of every variety of produce found in this latitude. Many years ago tobacco was raised, but, except to a limited extent, this has long since been abandoned for the staple grains-corn, wheat, oats and rye. The land is eminently adapted for the cultivation of vegetables, including sweet and irish potatoes, peas, beans, melons, &e., large quantities of which are annually raised and shipped to the eities of Baltimore, Philadelphia and New York. Perhaps no section east of the Mississippi river is more favorable to the successful culture of the larger and smaller fruits, such as apples, peaches, pears, cherries, strawberries, raspberries, &c. According to the census of 1890, the population of the county was 19,747, divided as follows: whites, 12,893; colored, 6,854.

The capabilities of Worcester county lands in the directions indicated, as to extent of acreage and all the favorable incidents of adaptation, are not half utilized. Clover, timothy, orchard grass, alfalfa and all the grasses are successfully grown and used for hay or pasturage. On the seaside farms, which border the county on one side for a distance of 40 miles, are hundreds of acres of salt marsh, in a considerable degree covered with a natural grass, luxuriant and valuable, furnishing pasture range for large herds of stock and rich hay for animals in winter quarters. The river, bays and creeks abound with fish, shad, herring, perch, rock, trout, drum, sheepshead, &c. The oyster industry is extensive and important, giving employment to thousands and supplying a profitable source of investment.' The oysters of Worcester county waters are superior to the Chesapeake bivalve, and have a reputation of their own in the great cities where they are prized as a delicious luxury by the epicure. The commercial facilities of the county are very good. Assateague bay, with inlet at Chincoteague, Va., is navigated by schooners of fair size, engaged in trade with Philadelphia, New York, Boston and other seaports. The Pocomoke river, as already stated, tra verses the county, and though narrow and crooked, it has a good, deep channel, affording good commercial facilities from Snow Hill, the county town and head of navigation, and from all points along its course to the Chesapeake. The steamer Tangier plies regularly between Snow Hill and places on the river, stopping at Onancock, Va., and Crisfield, Md., and the city of Baltimore, making two trips weekly. The Tangier is a commodious boat, carrying large amounts of produce, consisting mainly of potatoes and fruit, and returning with freight of every description.

Besides Snow Hill, which has a population of 1,483, an increase of 16.22 per cent. since the census of 1880, the principal towns are Berlin, in the northern part of the county, and Pocomoke city, on Pocomoke river, in the southern part. These towns and several smaller villages are directly on railroads, affording daily communication with Baltimore, Philadelphia and New York.

Besides canning establishments and steam mills for sawing, dressing and manufacturing lumber, these towns have other industries. There is quite a large factory for weaving cotton-yarn at Snow Hill, and another for making whips of different sorts. Pocomoke City, which has a population of 1,866, an increase of 30.95 per cent. since the census of 1880, is largely engaged in manufacturing doors, windows, mantels, brackets, &c. This town has many advantages, and is a neat, enterprising and thrifty place, has the electric light, and is under excellent corporate management. It is only a few hours' travel from Pocomoke City to Norfolk and Fortress Monroe, Va., with trains constantly going to those points and the great cities

Near Berlin, and immediately on the Atlantic Ocean, is the seaside resort Ocean City, famous for its beauty and salubrity, and popular with citizens of Baltimore, Philadelphia and Delaware.

Land in Worcester County generally is cheap, prices varying according to locality and quality, from \$5 to \$50.

Agricultural implements of improved kinds are coming more and more into general use. Every season there is an increased demand for reapers, mowers, drills, planters, harrows, &c.

Much more interest is manifested in improved stock than formerly. This remark includes all varieties of stock—horses, cattle, sheep and hogs. In some isolated places in remote points of the county, where formerly stock of all kinds was of the most inferior grade, may now be found on farms belonging to the poorest farmers, specimens of cattle that would not be a discredit to a herd in the best parts of New York or Pennsylvania.

SOUTHERN MARYLAND.

A COUNTRY WITH A BRIGHT FUTURE—OPPORTUNITIES FOR ENERGETIC IMMIGRANTS.

All sections of Maryland offer opportunities and invite not only our own people to come forward and develop them, but present inducements for a very large immigration. No section of the State offers a better field for enterprise and industry than the very oldest settled part known as Southern Maryland, comprising the counties of Anne Arundel, Calvert, Prince George's, Charles and St. Mary's. There was a time when Southern Maryland was the garden spot of the State. Within its area once lived many of the wealthiest and most distinguished families of the State. Rich plantations covered the country from Elkridge Landing to the Potomae, and there was a flourishing community of planters from the Patapsco to the Chesapeake Bay and the Potomae. Cultivated by slaves, the land was productive, and the tobacco fields of Southern Maryland were in those days the pride and wonder of the country.

But the war between the States desolated Southern Maryland. In 1865, those who had been rich were poor. The emancipation of slaves in 1862, destroyed the working force of the whole region, agricultural blight fell upon the land. The old families sold out their plantations or parted with a portion of their possessions to strangers. A new population took the place of the old, and a period of retrogression set in. For forty years Southern Maryland has been overspread with

industrial night. There are, however, signs of progress in this once much favored locality. Soil, climate, situation and topography are all that could be desired for splendid country homes and thriving farms. The difficulties attendant upon paucity of labor are being gradually overcome. Patient industry has put the older residents on their feet again, and newcomers have seized opportunities, and the battle of development has begun in good earnest. Towns along the railroads and elsewhere are springing up. Washingtonians and Baltimoreans are building country-seats here and there. Manufactories are getting a foothold, while the reported sale of 1,700 acres of land in Prince George's to the Danes has, perhaps, solved the agricultural question.

Among the towns, Annapolis, Prince Frederick, Laurel, Beltsville, Bladensburg, Hyattsville, Leonardtown, Lower Marlboro, Port Tobacco, Bryantown, Bowie, Patuxent, Upper Marlboro and Piscataway are, doubtless, taking the lead. Some of these are assuming the character of suburban villages, while others are locating manufactures. Canning establishments are springing up here and there, factories of various kinds are building in a few places, and the tide is evidently setting in toward prosperity.

In the future development of the State, Southern Maryland is bound to play an important part. It is impossible that a region of so great fertility should be left to go backward.

Just after the war the Eastern Shore was in about the same condition as that from which Southern Maryland is suffering now. It had only limited railroad facilities; its lands were, except in certain localities, much impoverished, and the people were dispirited, non-progressive, and disposed to let matters shift along at hap-hazard. There were a few men of energy in every county, however, who remembered a prediction of thirty years before, that the Eastern Shore was destined to

become one of the garden spots of the country, and who lent their aid to every project for making the natural attractions of their section known to the outside world. The attention of capitalists, small farmers at the North, and laboring men generally, was by degrees attracted to this region, and in course of time an inflow of money and settlers set in, introducing new enterprises and new business habits and methods of agriculture. This inflow has gone on steadily increasing until the Eastern Shore may be said to have actually become a "garden spot," producing immense quantities of fruits and vegetables which find ready sale in the Northern markets as well as in Baltimore and Washington.

Southern Maryland is now pretty much in the same position as the Eastern Shore was thirty years ago. It has equal advantages of soil and climate, and is probably quite as well adapted to the cultivation of fruits and vegetables. With a well sustained, energetic effort on the part of its more enterprising people, aided by outside capital and the adoption of the latest methods of farm and garden cultivation, Southern Maryland could be converted into an important region of supply for Baltimore and Washington.

The rivers which intersect the Southern Maryland counties are mostly navigable many miles from their mouths, thus forming good and important water courses. The Patuxent river, which divides Calvert county from St. Mary's, Charles and Prince George's counties is a tidal stream navigable by steamers for a distance of some forty miles from its mouth. The country bordering the rivers and bays is flat, and as one goes further inland it becomes rolling, and in some places it is elevated from two to three hundred feet above the tide. Following almost every valley in the counties are brooks, fed by clear, cold springs, which flow continuously and evenly, which supply man and beast with pure, wholesome water. The river valleys, and those of the numerous small streams, are narrow,

level, and of extraordinary fertility. The surface soil of the uplands are generally a light, friable loam, overlying a strong clay, with deep substratum of shell and green sand marl—natural deposits of very great economic value.

Southern Maryland, owing to the tempering winds from off the wealth of waters washing its shores, is blessed with a climate remarkable for its equability, the mean of summer and winter temperature of the air being fifty-six to fifty-eight degrees; that of winter, from the close proximity of the warm current of the Gulf stream, ranges from a mean of thirty-six to thirty-eight degrees, or but little, if any, less mild than that of eastern North Carolina, two hundred miles further south.

SOIL AND CLIMATE.

The land is very productive and easy of tillage, some that has been in cultivation two centuries is yet as productive and at as little cost for labor, as the rich garden land about the cities. It waits only the touch of enterprise, the introduction of new and modern methods, the utilization of its natural advantages, to reach that high appreciation and value in the present which it enjoyed so fully in the past. Here the stock raiser will find land and climate perfectly fitted for the economical production, nurture and growth of cattle, and close proximity on either hand to the best markets for his surplus small stock, hay and grain.

When once the fact shall be clearly realized, that, by reason of peculiarily favorable position and mild climate, Southern Maryland lands, when devoted to the production of a varied agriculture, such as, for example, market farming in fruits, early vegetables and the like, shall be worth more per acre, and will produce better cash returns than the land of any less advantageously situated region, even where the natural fertility of soil may be greater, for as the ability to supply the near-by

city markets is increased, the money value of each acre, as well as of its products are also increased.

PROXIMITY TO MARKETS.

This southern portion of Maryland has in common with some parts of Pennsylvania and New Jersey the advantages of the near neighborhood of great markets. The proximity of such important markets as those of Washington and Baltimore, are found to be of little value to the farmer who ships his wheat, corn or tobacco to the seaboard for foreign export; but to the truck or market farmer, who raises early vegetables, fruits, flowers, poultry, etc., the value of a near-by market is well-nigh incalculable. But the lands of this region possess yet other and more important advantages than those of nearness to market. During the early months of the year, while the market farmer of the neighboring State is watching the weather and endeavoring to protect his early plants against late frosts, he of the milder climate of Southern Maryland is shipping his early crop to market. If only the known better methods of culture be applied, and diligence and care used, all the desirable market crops of the temperate zone, together with many of a sub-tropical character, may be produced in the greatest perfection, and in season to control the market for weeks before those produced a few miles further inland have sufficiently matured.

THE FRUITS OF SOUTHERN MARYLAND.

One of the pleasing experiences of the visitor to Southern Maryland is of wonder at the excellence, variety, large size and fine flavor of the cultivated and native fruits. The mildness of the climate permits trees and plants to grow with great rapidity, to bear early, and to admit of the sub-tropical and the temperate being cultivated side by side in the orchard. Fruit growers have, therefore, the best opportunities here to

secure the outside markets, as fruits ripen so much earlier, often three to four weeks, than in the vicinity of New York and other northern cities to which shipments are made.

The large profits attendant upon systematic cultivation, preservation, and marketing of the best fruits, is well understood by those engaged in the business. To those farmers not so experienced this fact may be of interest: that the orchard or vineyard rightly managed yields a far better return for the capital and labor expended than even the best of the ordinary farm crops.

In other States the orchards of former years are rapidly passing away, some of the natural elements required by the fruits apparently having been exhausted. The planting of orchards in Southern Maryland is now for the first time, being entered upon by experienced fruit growers, the object being to secure the market from the frequent interruptions caused by failure of the fruit crop.

Among the more valuable fruits, notably, apples and pears, many of the best and most favorably known types and varieties had their origin on the shores of the Potomac. The apricot, nectarine, and the fig; as also the almond and the English walnut, have been found in the gardens of many of the planters throughout this section, since the earliest settlement of the State.

To the grape culturist, and the wine-maker, no more need be said than that this is the natural home of the American grape. All the more delicate varieties grow here to perfection, including the champagne and others which have not been found to thrive elsewhere, even in Southern California.

NATIVE WOODS.

The forests and timbered lands of Southern Maryland are yet, after extensive cutting for ship-building, railroad and commercial purposes, of great extent and value. The whole peninsula was originally heavily timbered with white oak, red oak, chestnut, hickory, walnut, ash, and other hard woods, and owing to the large areas usual to holdings, very much of the original forest timber still remains; in addition to which there is scarcely to be found a farm, however long under cultivation, without some considerable reserved timber. Pine lands of nearly equal extent, and furnishing valuable timber, occur throughout all of Southern Maryland. On the whole, considering situation, abundance of supply and availability for manufacture and shipment, timber must, for many years to come, hold a high rank among the valuable resources of this region.

The white wood of Southern Maryland is exclusively used in the form of pulp by manufacturers of paper. The heavy freight on bulk shipments in the rough state of green wood might naturally be supposed to be a bar to long distance carriage in that state; but the heavy duty on imported Canadian wood-pulp and the increasing scarcity of suitable material at home has caused the pulp manufacturers, especially those of New England, to seek the raw material in Southern Maryland, notwithstanding the great length of haul, much of which is by railroad, and consequently immensely expensive.

Large quantities of the finest pulp wood is now being taken out for shipment north; but very much of the wooded areas are yet untouched; thus the field is wide and valuable for the paper-pulp manufacturer who shall take advantage of the opportunity offered in the white woods of Southern Maryland, to start a manufactory of paper pulp in that section of this State.

THE FISHING INDUSTRY.

The bays and estuaries, and the greater and lesser rivers and inlets of Southern Maryland, furnish a practically inexhaustible supply of the more important food fishes, of which the most numerous and widely distributed, as also, the most valua-

ble commercially, are the members of the herring and shad families. The Potomac herring is immensely numerous in all the waters of Southern Maryland—while the shad fisheries of the Potomac river and its estuaries furnish that best of table fish to all the markets of the eastern cities.

Many other varieties of choice and commercially valuable food fishes abound in these waters. Notable as well for their extreme delicacy as for their abundance, is the superb blue fish of the coast, the striped bass and sea trout; while black bass, white and yellow perch, pike, and other well-known fresh and brackish water fish, are here to swell the list of epicurean delicacies freely furnished to man.

The fish industry of Southern Maryland gives employment to a large number of men and boats. In the spring and fall the fish are caught, principally by means of trap nets, and during the summer by means of seines. The fishermen are scattered along the shores of the Potomac river and Chesapeake bay and their estuaries, and fish can be had on these shores as low as \$2.50 per thousand for herring, \$10 per thousand for shad, 10c. per bushel for alewives or menhaden, 3c. per pound for catfish, 5c. per pound for rockfish or striped bass, 5c. per pound for trout or weakfish, and the many other kinds of fish in proportion.

In the spring a large number of the farmers send their wagons to the nearest fisherman and buy from 500 to 5,000 fish, just caught, and salt them down and otherwise preserve them for their use during the year.

THE OYSTER TRADE.

Extensive natural beds of the finest known oysters, occur along the shores and inlets of the Potomac and Chesapeake, the gathering and shipment of which employs a large amount of capital, numerous fleets of vessels, and give employment to a vast number of men. Oyster packing and canning has hitherto been largely monopolized by the environing cities of Baltimore, Norfolk and Washington, from which points shipments are made to all parts of the United States.

The development of the oyster by selection and cultivation, or oyster farming, has, where entered upon and conducted as a business, been found to be enormously profitable, owing to the extraordinary rapidity of increase in size and value of the products of cultivated beds over those of natural deposit so much so that lands bordering on suitable oyster waters are coming into very active demand.

Many resident proprietors are now engaging in systematic oyster planting, and in the establishment of packing and canning factories. The oyster business thus locally established and conducted, will, as a natural result of the saving in freights upon bulk shipments, and the employment of the cheaper labor of the country, soon become one of the largest and most profitable of the food supplying industries of the land.

The oysters of Southern Maryland find a ready market in Washington, Baltimore and Philadelphia, and sell for from 40 cents to \$1.00 per bushel. Any private individual can, without any expense to himself, gather in a short time enough good large oysters for a large family.

STOCK RAISING.

There are few, if any more interesting or profitable lines within the many open to the enterprising farmer coming to Southern Maryland, than those of stock raising and dairy farming. The long and seldom dry summers, together with the absence of excessive cold during the short winters, permits the growth of a great variety of nutricious grasses nearly all through the year. The natural grasses, notably the native blue

grass and its varieties, spring from the soil without artificial effort, while with cultivation they give promise of abundant returns to the stock and dairy farmer. The cultivated grasses, whenever tried for winter use, baling or shipment, give surprising returns, filling the barns, or furnishing a lucrative business to the packer and shipper of baled hay.

Cattle and sheep graze out, almost wholly without care or shelter in all seasons. Now when we remember that the cost of housing and winter feeding of stock in the northern and most of the Middle States is very considerable—not less than \$6.00 to \$10.00 per head for feed alone, each winter—not to count the extra care and labor involved, we see that there is a net gain of such amount on each head, to the producer here, over his neighbor in an adjoining State, or sufficient to make systematic stock farming and dairying much more easy to engage in and more profitable in results, than even upon the free-grazing lands of the west.

Sheep, as is well known, to produce the finest staple of wool require a moderate climate, temperate in summer that it may be of fine texture without being scant, and mild enough in winter to prevent any tendency to coarseness. Southern Maryland offers both these advantages besides which there is no loss in either young or old from the severity of the winter cold as on the ranges in other States.

PEACH CULTURE.

The peninsula of Southern Maryland, the peach producing center of the country for coming times, covers an area of some two thousand square miles—sufficient if put into orchards to supply the markets of the world. It is embraced between two extensive bodies of salt water, and is, consequently, within and subject to the climate influences most favorable to the rapid and perfect growth of the peach.

The central and southern portions of the peninsula, the counties of Charles, St. Mary's, Calvert and Anne Arundel, furnish lands of the highest promise; the tempering influences of the Chesapeake and Potomac waters moderating the extremes of both heat and cold to that degree which is found requisite to the highest perfection of fruit development, every breeze being laden with saline particles that not only carry destruction to many species of fruit infesting insects, but furnish to the trees that fruitful, vivifying quality which enables them to bear abundantly and to endure to a great age.

PRICE OF LAND AND IMPROVEMENTS.

Some of the tracts of land offered and more especially adapted to peach culture, are of large extent, the majority, however, range from two hundred to three hundred acres each, very many of these are in a good state of cultivation, ready for orchard planting, and in a highly improved condition. Smaller parcels of fine orchard land occur frequently, sometimes improved by good farm buildings, and again with only commonplace tenant houses, or no improvements at all beyond that of inclosure. All the more considerable tracts, as also many of the smaller farms, have good and expensive farm buildings, the dwellings usually well situated, large, roomy houses, built in that style so popular with the Southern planter a generation ago, low pitched roofs and wide, shady verandas, surrounded by grassy lawns through which gravelled walks lead to the groups of barns and farm buildings scattered about. Not much of precision or order in their arrangement perhaps, but convenient, useful, and in keeping with the outdoor habits of the people. According to condition of soil, and buildings thereon and to location, the price for land varies from \$5 to \$25 per acre, in large or small tracts. Some land commands a still higher figure. For putting up new buildings or repairing old ones, all kinds of material can be quickly had from Baltimore or Washington. Terms upon which land is rented, is about as follows: The owner furnishes the land, dwelling, team and all the necessary implements for working the crops, and receives two-thirds of the crop, and the tenant gets one-third. In cases where the tenant furnishes teams and implements, better arrangements are made. The tenants are generally furnished with employment at remunerative wages, by the landlord or neighboring farmers, when not engaged in working their crops.

DAIRY FARMING.

Dairy farming is early destined to become one of the leading industries. The advantages are such as to offer peculiar inducements for the enterprising dairy farmer. It has been said by an eminent agricultural writer that "whoever has blue grass has the basis of all agricultural prosperity; and that man, if he have not the finest horses, cattle and sheep, has no one to blame but himself. Others, in other circumstances, may do as well, he can hardly avoid doing well if he will try." Among the rich and succulent grasses indigenous to the soil of Southern Maryland is this justly esteemed blue grass, so necessary to the production of rich, sweet butter and cheese and juicy, tender beef.

The dairy business has but just been entered upon, some large and prosperous herds are now furnishing milk, cream and butter to the cities of Washington and Baltimore. But the people of Southern Maryland have almost everything to learn of the proper manner of making butter and cheese, and preparing them for market, meanwhile the markets are the best which the Eastern States afford. There is plenty of room for the dairyman, and plenty for the products of his farm, be the price ever so high, the demand will always equal the supply.

TRANSPORTATION FACILITIES.

The facilities for travel, and for the transportation of freights are amply sufficient for present purposes. Water and railroad communication can be had with all important trade centers, north and south. The numerous transportation lines of the Potomac and Chesapeake furnish daily connection with the principal seaboard States. The railroad system of Southern Maryland now operated comprises the Baltimore and Potomac, a part of the Pennsylvania trunk line system, the Baltimore and Ohio, the Annapolis and Elk Ridge, and the Southern Maryland over part of its route. The railroads in progress, or in process of development, are the Baltimore and Drum Point, the Southern Maryland to connect Washington and Point Lookout, the Washington and Cheasapeake, and the Washington and Marlboro (electric system). The older lines creating or aiding in the growth of new enterprises, the new lines in progress, or in prospective, having the effect of encouraging the opening up of new industries, and the investment of capital in localities heretofore undeveloped.

THE DRUM POINT RAILROAD.

The completion of the railroad to Drum Point, at the mouth of the Patuxent river, a distance of seventy miles from Baltimore, would ensure quick facilities of transit for a section of the country which is now solely dependent on water transportation. The road would run through a practically new and undeveloped region capable of producing a great variety of crops and watered by numerous water-courses. The lands are cheap and easy of cultivation, and oysters, fish and crabs are abundant. Clays for brick, drain pipe and terra cotta products are found along the shores of the Patuxent in such localities as to make them easy of manufacture and shipment. Timber for vessels, buildings and general manufacture, is plentiful. If the road were constructed it would afford the people of Balti-

more quick and easy access to various excursion points, including Fair Haven, Drum Point, Point Patience, etc. Drum Point harbor is conceded to be second to none on our coast, and would be an admirable point for the development of the oyster industry, as hundreds of oyster vessels are now obliged to take refuge there during stormy weather, and would find a safe and convenient location for discharging their cargoes.

From Drum Point the road and its connections could be continued across the Patuxent through St. Mary's county, across the Potomac into Virginia, and thence to Richmond and Norfolk, giving Baltimore a direct route to the South, which her business men have so long needed. If the oyster industry were once established at Drum Point, various other industries would spring up in its wake.

MINERALS AND ORES.

Along the banks of the upper Patuxent, near Lower and Upper Marlboro, there are several valuable banks or deposits of marl which is mined for the manufacture of commercial fertilizers. Near Lyon's creek there is a valuable deposit of fine chalky mineral which is extensively mined. At first the silica was shipped in small quantities for experimental purposes, in order to find its commercial value. It has now been ascertained that it is not only valuable as a polishing powder, but can be utilized for packing around steam chests and boilers. It is also used now extensively for packing around vaults and safes used for fireproof purposes. The silica found on the Patuxent is said to be the purest that has ever been found in this country, and in foreign countries, a mine in Germany is said to be the only rival in purity. Several thousand dollars have been spent here for mining facilities. At first it was shipped wet, but the heavy freight charges have induced the drying of the mineral for shipment. For this purpose a number of drying-houses have been erected and heaters used.

When dug from the mine it looks very much like what is familiarly known as Fuller's earth; but upon examination it is found to be a very much finer substance and is easily distinguished by the most causual observation. When mined it is thrown down long shutes to the wash-house, where it is washed clear of any sand that has filtered into it from the overlay of soil, and is carried then to the hot-air rooms, and placed on long shelves to be dried. It is then found to be very light and closely resembling chalk. In this condition it is now being shipped in large quantities.

This is but one of the many remunerative industrial enterprises of this wonderful section of the State. There are many more waiting for the intelligent immigrant and capitalist. Southern Maryland is rich in natural resources and is on the eave of such manufacturing and commercial developement as shall make it the center of industrial activity among the seaboard States. In its abundance of resources there is wealth for a million people, its fisheries, its oyster industry, its fruit culture, its timber, its commerce and manufacturies are each separately sufficient to give employment and wealth to a dense population.

ANNE ARUNDEL COUNTY.

Anne Arundel is the most northern of the counties comprising the section known as Southern Maryland. It embraces an area of 400 square miles, and has for its boundaries the Patapsco river on the north, separating it from Baltimore city and county, Chesapeake bay on the east, Calvert county on the south, and Prince George's and Howard counties on the west. According to the census of 1890, the population was 34,094, an increase of 5,568 or 19.52 per cent. since the census of 1880. There are 19,441 white persons in the county and 14.648 colored.

A portion of Anne Arundel county is immediately opposite the city of Baltimore, and is the garden spot of the metropolis of the State. The Aunapolis Short Line Railroad runs through this fertile land, and the new Curtis Bay Electric road will make it easy of access to the city. Access is also afforded by the "Long Bridge" which stretches across the Patapseo from Baltimore to Brooklyn. The proximity of this section of Anne Arundel county to the city, and the light, fertile character of the soil, adapt it especially to the raising of garden produce for the city markets, which is caaried on successfully to a very large extent.

Some of the best farms in the State are to be found in this locality. One gentleman in this locality has 640 acres which is adapted to all crops. In the season of 1891, he had one hundred acres in peas, sixty acres in strawberries, sixty acres in wheat, forty acres in grass, and one hundred acres in corn. Besides, thirty acres are devoted to peaches and forty acres to pasture. 4,000 trees are in the peach orchard, but as last year was the first year of bearing, only about 2,500 bushels were gathered.

In the height of the season one hundred and twenty-five hands are employed as pickers, and in 1891, they gathered 6,000 bushels of peas, 107,000 quarts of strawberries and 23,000 quarts of cherries. Pickers are paid in accordance with amount of work done, and receive fifteen cents per bushel on peas, and one and a-half cents per quart on strawberries and cherries. 1,500 bushels of wheat was harvested and 1,100 barrels of corn, equal to 10,000 bushels on the ear, gathered, and ninety tons of hay raised for consumption on the farm. The wheat was sold on July 10th, at \$1.05 per bushel, and the corn brought \$2.40 per barrel. Hay was worth \$12.00 per ton on the farm.

Our farmer friends in the North and West who wish to benefit themselves and are seeking new locations, are invited to do a little figuring on the income of a farm of this character. Maryland has never known a failure in crops, and there are to-day as fine opportunities to secure good locations as there has ever been in the history of the State.

No portion of the State can raise watermelons, canteloupes, cabbage, peas, string beans and tomatoes, superior to those grown in that section of Anne Arundel county between the Severn and Patapsco rivers. The peach orchards in this section are also extensive and productive. Strawberries and other small fruits grow abundantly and ripen easy. In the summer season the southern portion of this district is one vast and beautiful garden of fruits, berries and vegetables, ornamented with fine and handsome residences. Land in this neighborhood is worth from \$50 to \$500 an acre, and there is very little for sale. In this neighborhood are also numerous villages and settlements which are rapidly increasing in population and in importance as manufacturing centers. Brooklyn, Fairfield and South Baltimore or Curtis Bay, show wonderful progress in the past ten years.

The fourth district of the county begins near Millersville, and runs up to Annapolis Junction on the Washington branch of the Baltimore and Ohio Railroad. This road skirts the northern boundary, and the Baltimere and Potomac Railroad runs through the southern section of this district. The Annapolis, Washington and Baltimore Railroad runs nearly through the centre and makes communication with Baltimore and Washington easy.

The land in the center of the fourth district is light and sandy; the other parts kind and fertile. This district is a flourishing section, including in its boundaries Jessup's, which is rapidly improving. Besides the common schools, it has an academy at Millersville and one at Jessup's. The churches are Catholic, Episeopal and Methodist. The springs of this district are noted for their purity and volume. The Maryland House of Correction is at Jessup's, in this district. Land at Jessup's is worth from fifty to two hundred dollars per acre.

Other tracts can be bought in the district from ten to seventy-five dollars per acre.

There are no railroad facilities in the section south of Annapolis. All the produce is shipped by boat, and in some cases has to be hauled a distance of ten miles or more to the landing. This will be remedied when the Drum Point Railroad, now under construction, is finished. There are some good grass farms in the lower section, and in the whole county the soil is favorable to fruit-growing. There are many profitable peach orchards in the southern part of the county, and their number and acreage is rapidly increasing. Farmers along the line of the proposed Drum Point Road say if railroad transportation is afforded them, it will not be long before lower Anne Arundel will also become a great trucking country. Tobacco of very fine quality is raised in all parts of the county, and corn grows luxuriantly. In the northern portion of the county, iron mines are worked successfully, and there are several iron furnaces profitably engaged in manufacturing pig iron.

The improvement in farming machinery is going on slowly but surely. Instead of the old cradle, the self-binder is now used. Live stock has also improved in quality and quantity. An excellent opportunity is afforded for industrious immigrants to locate in Anne Arundel, farm hands, mostly colored, being very scarce.

There are good openings for flour mills and canning factories in lower Anne Arundel, as well as in Annapolis; and at Horn Point, an adjunct to the city, which now boasts of a glass factory that gives employment to a number of people. There are about eight canning establishments in the county. Near Annapolis, on the Chesapeake bay, is the celebrated excursion summer resort, "Bay Ridge." It is estimated 50,000 people visit this delightful spot during the summer season.

ANNAPOLIS-THE CAPITAL OF THE STATE.

Annapolis is the largest city in the county and the capital of the State. In 1694 the provincial government was removed from St. Mary's city, in St. Mary's county, and in 1772 the present State House was begun, but it was not finished until 1793. This ancient building has been the scene of many important historical events. In it the Continental Congress sat during the Revolution, and in the old Senate chamber, at the close of the war, General Washington surrendered to the people his commission as commander-in-chief of the American army. The convention which originated the Federal Constitution first assembled in this old State House. The old city was the seat of the wealth and culture of the State during the early days of the Republic. Some of the stately mansions of the Revolutionary period remain in the city as models of liberality, ease and convenience. Among better examples of colonial houses still remaining may be mentioned the residences of Charles Carroll, of Carrollton, Samuel Chase, Chancellor Johnson, Anthony Stewart, Jonas Green, Brice, Rideout, Harwood, and many others.

According to the census of 1890, Annapolis contains a population of 7,604 persons, an increase of 14.48 per cent. over the census of 1880.

The corporate limits of Annapolis have nearly been rounded out into building lots, on which there are not only comfortable, but many stately residences. Yet, along the banks of the Severn and Chesapeake, contiguous to Annapolis, are many beautiful sites which can be bought at most reasonable prices, from \$100 an acre and upwards. Building lots in the city, in eligible locations, bring from \$30 to \$40 a front foot in fee. Annapolis has a delightful society. The Naval Academy, St. John's College and the Redemptorist Theological School are located in Annapolis. The city has four Methodist churches, two for whites and two for colored; three Episcopal churches,

one for colored people; one Catholic, one Lutheran, one Presbyterian, and one Baptist, for colored people. It has the ordinary schools of the public school system. Its sources of revenue are the oyster, fish and crab trade; the employment of its people in the Naval Academy; trade with the residents of the Naval Academy; merchandising with the surrounding country, and its receipts from the gathering of state officials and politicians. Eight daily railroad trains—four over the Annapolis, Washington and Baltimore, and four over the Short Line—put Annapolis in almost hourly communication with Baltimore. The steamer Emma Giles also runs there from Baltimore three times a week, continuing on to South, Rhode and West rivers.

THE BEAUTIES OF SEVERN RIVER.

The Severn river enters the bay at Annapolis, and may be regarded as an arm of the Chesapeake rather than a river. Opposite the Naval Academy it is nearly a mile wide, and from this point for six miles it maintains an average width of half a mile, when it expands into a bay or lake of three miles diameter. This is Round Bay or "Eagle Nest Bay." An island—Saint Helena by name—lies in the centre of the southern portion, or "Little Round Bay." The Severn continues its course for some miles, gradually diminishing in width and depth until it loses its characteristic size in the romantic surroundings of Indian Landing.

From Greenberry Point Light to the head of Round Bay is nine miles, and the depth of water in the channel varies from 19 to 47 feet. The shores sloping from the uplands to the river are varied by decided eminences attaining the highest 155 feet elevation. Forty such distinct little mountains can be counted on an accurate survey.

With such elements of beauty and utility, the hillsides clothed with checkered fields and forests, the broad river navi-

gable for the largest craft, it is astonishing that this region remains almost an unknown land to the people generally. As river scenery it has been compared to the Hudson, and certainly, excepting always the grand gorge of the "Highlands," the comparison can be maintained. But it may be better described as resembling on a larger scale some of the most beautiful of the rivers of England, a similarity which extends in its picturesque aspect to the Western Shore generally, and may account for the name Severn given by the early settlers to recall their "home" associations.

The many indentations of the shore-line and constantly shifting combinations of headlands and bluffs, and the final expansion into the broad water of Eagle Neck bay, now contracting and then expanding the view as the steamer plows its way toward Indian Landing, present as varied and attractive a sail as any nine miles of river scenery in our country.

ROUND BAY.

Round Bay is fourteen miles distant from Baltimore, and "Mount Misery" at its northern side, rising 155 feet above the water gives a view commanding the bay, with its headlands, slopes, and the Island of St. Helena, the Severn with Annapolis in the distance, and also looking eastward, the perspective of the Magothy river or bay, with the Chesapeake beyond. This point was used as a signal station and fort during the late war, and would be a most eligible site for a summer resort and observatory were it made accessible to the citizens of Baltimore by a direct railroad to that city. It lies within a very short distance of the line surveyed for a "short line" road, and cannot be more than eight or ten miles from the termination of the Curtis Bay Branch of the Baltimore & Ohio. This region is susceptible of being made a great pleasure resort and outer park for the city of Baltimore, and at the present rate of railroad speed could be put within twenty minutes ride of the city. None of the greater parks of the European capitals are so near as this is to Baltimore city, and no city in the United States has so beautiful a spot as near.

Indian Landing, about three miles distant from Round Bay, is an attractive place. Three little islands abreast of the "Landing" add picturesqueness to the locality. Fish, crabs and oysters are plentiful here and in Round Bay, and duck shooting is extensively indulged in at the latter point.

The advantages of Round Bay as a naval station have been urged, and especially by Admiral Porter, as preferable for an iron-clad or monitor arsenal to League Island. It has also been advocated as a terminus of the Chesapeake and Ohio Canal. Its sloping banks and hillsides are peculiarly adapted to vineyards and fruit orchards. The finest sand for glassmaking is mined and shipped from this point.

SOUTH BALTIMORE HARBOR AND IMPROVEMENT COMPANY.

The life and activity displayed at Curtis Bay since 1887, is wonderful. In that year, the South Baltimore Car Company purchased twenty acres of land from the South Baltimore Harbor and Improvement Company, which has made a great change in that region.

The Improvement Company is the owner of about 1,500 acres of land, and five miles of water front on the south side of the Patapsco river. The land is beautifully located, sloping from the waters edge to a heighth of about 200 feet. The vicinity is free from all malarious influences, and is regarded as one of the healthiest locations adjoining the city of Balti more. The center of the water front consists of the famous land bound harbor of Curtis Bay, one of the most picturesque sheets of water in the State. There is an average depth of water of 25 feet in front of the property, allowing the largest steamers to discharge their cargoes. An immense pier has

been erected, 800 feet long and 100 feet wide, for the use of the Baltimore and Ohio Railroad, which connects with the property by its Curtis Bay Branch.

The advantages of South Baltimore or Curtis Bay for manufacturing purposes can not be overestimated. Already, many leading capitalists from all sections of the United States, have recognized its advantages for the investment of capital, and many large industries have been started there in preference to other sections of the country. Among the leading enterprises which have been established on Curtis Bay within the last five years, may be mentioned the large sugar refinery which can be seen from any elevated point in Baltimore. It has a capacity of 12,000 barrels of refined sugar daily, and gives employment to 150 men. The South Baltimore Car Works, which are in full operation, are turning out an average of fifteen new freight cars daily. About 500 men are employed in the shops and the works are kept busy. Up to the present time about 5,000 cars have been sent out and the yearly business amounts to over \$1,000,000. Among the roads for which cars have been built by this concern are the Baltimore and Ohio, Richmond and Danville, Atlantic Coast Line, Wilmington and Northern, West Virginia Central, Eastman Heater Car Company of Boston, Hartford and Connecticut Western, and B. and O. Southwestern.

Among the other leading enterprises located at Curtis Bay, are the Ryan & McDonald Machine Shops, nut and bolt manufactory, South Baltimore Foundry, barrel factory, and others in contemplation of erection. The Ryan & McDonald Machine Shops were removed to Curtis Bay from Waterloo, New York.

The South Baltimore Harbor and Improvement Company have creeted on their property several hundred neat and substantial brick houses, which are in great demand by the growing population. The company has a large quantity of unim-

proved land which they will sell or lease for manufacturing or dwelling-house purposes at moderate rates. Manufacturers will find it to their interest to examine this property before locating elsewhere. The town contains several schools and a Presbyterian, a Catholic, a Methodist, a Baptist and an Episcopal church. An electric railway is now in course of construction from the city of Baltimore to the southern limits of the Curtis Bay property, the cars to run every ten or fifteen minutes, and the fare to be only five cents.

CALVERT COUNTY.

Calvert county, a peninsula lying between the Chesapeake bay and Patuxent river, has an area of 218 square miles, and possesses many advantages calculated to be attractive to the home-seeker of moderate or limited means. Lands are cheap, and the people are willing to encourage and invite immigration by disposing of them on the most favorable terms. The cheapness of land is not accounted for by the poorness of the soil, as some might infer, but by the sparseness of population, there being but about 9,860 souls in the county, white and colored, and vast tracts of land easily improved lie unbroken by plow from year to year. The whites in the county number 4,757, and the colored, 5,103. Land thickly wooded with wellgrown pines can be bought for two dollars an acre, while good productive cleared lands can be bought at from four to ten dollars per acre, according to situation and improvements. A short time since a fine farm in good state of cultivation, with water frontage, improved by dwelling and barns, consisting of 400 acres, sold for the incredibly small sum of one thousand and thirty dollars. And this is not run down, worn out land, but will yield 20 hogsheads of tobacco and 150 barrels of corn next season, with proper culture.

The finest river-bottom farm lands, the cream of the county, can be bought for twenty dollars an acre. In a ride through

the county one readily observes that by far the greater part of the land is unimproved, and this simply because, as has been intimated, our farmers have their hands full to cultivate the lands already cleared. The land donominated improved is as good naturally as that now under cultivation, and yields readily and kindly to the efforts of the husbandman as the occasional patch, often in the midst of a pine forest, taken up and cultivated by the aspiring freedman, abundantly attests. That no such thing as a real estate bureau or concerted real estate boom exists in this, as in other Southern Maryland counties, is a matter of real surprise to those who are acquainted with the advantages of Calvert county. Turning from the mere matter of land to other advantages, we would name large deposits of iron ore and silica. Iron ore of fine quality abounds, but, owing to the absence of land transportation, has never been put to practical use. Given a railroad, and Calvert would compete with Prince George's as an iron producing county. The silica mines, however, have been worked extensively and profitably, the silica produced being of a quality unsurpassed by any in the world. These mines are located in the northern part of the county, near Dunkirk. The forests contain all the native woods, and the cutting and sale of poplar wood for commercial purposes is proving quite a source of revenue, as is also the sale of oak and chestnut cross-ties.

This industry, however, must be confined to the forests contiguous to the river and bay or their tributary creeks, as all transportation to market is by water. The advantages for shipping by steamer and sailing vessels are as satisfactory as water transportation can possibly be. Rates are cheap, travel is comfortable, and trips are as frequent as freight and passenger traffic demand. In the summer of 1891, during the fruit season, Calvert had two steamers daily plying between the bay and river wharves and Baltimore. Tobacco, corn and fruit are the staple crops of the county. The soil, composed of light, rich,

sandy loam, is naturally adapted to the free production of these crops. Eighteen hundred pounds of tobacco to the acre or from seven to ten barrels of corn may be easily raised on the better class of farms on the river front, while only slightly less will be produced by the same class of farms inland or on the bay. It is a fact not generally known, but no less true, that the seasons in Calvert are several days in advance of any county in the State, and early fruits, strawberries, particularly, may be marketed at least a week earlier than can be done even by Anne Arundel. This also applies to vegetables. Corn of the Adams' Early variety was eaten from the garden of a resident of Prince Frederick on the 25th day of June the past year, and the season was unusually backward. What might be done under more favorable conditions may be imagined.

The oyster industry affords employment to about fifteen hundred men and boys during the fall and winter months. The eye of the public is now upon the oyster bed or "rock," the natural home of the bivalve, while the planting industry is in its infancy. Nearly all of Calvert's shores have been natural oyster beds, and that they may become substantially such again it is simply necessary that the seed oyster be deposited upon them. To engage in this business in a small way, or even more largely, needs but little capital, and large returns are sure and speedy. At Solomon's Island and also at Broome's Island are large settlements dependent solely upon the oyster trade for a livelihood. They live comfortably, own their homes and are out of debt.

As to the healthfulness of the county, there has never been an epidemic, and it is a fact of some significance that Calvert's doctors, almost without exception, are engaged in farming or some other employment in addition to the practice of medicine.

The people are becoming more and more aroused to the importance of public education, and the graded public schools,

white and colored, have a liberal support and large patronage, and are well taught by competent teachers, affording ample opportunity for all the youths in the county to secure a good English education. The close proximity to Baltimore and Washington, with their advantages of higher education, has seemed in the past to render the establishment of a school of college grade unnecessary, although there is a demand for a high school at Prince Frederick. Of churches, the M. E., the M. E. South, the Protestant Episcopal and the Roman Catholic, have organizations in the county, their relative wealth and numerical strength being indicated by the order in which they are here named. In the aggregate, they have a membership of about 3,400, or over one-third of the population, and fortytwo church buildings, which is a showing creditable to the people. At present, three church buildings are in course of erection—a Methodist Episcopal, at Prince Frederick; a Methodist Episcopal South, at St. Leonard's, and a Catholic, at Solomon's Island. Local option prevails throughout the county; the people are eminently peaceable and law-abiding; the county jail does not contain on an average more than two inmates per year, and the prosperity of the people is indicated in some degree by the fact that there are few paupers; the entire pension list amounting to only \$1,214.80 for the year 1891.

The county tax rate of ninety-one cents on the hundred dollars for all purposes is not high, but even this will be decreased when the courthouse is erected, to replace the one destroyed by fire in 1882, is paid for.

A general survey of all available facts leads, inevitably, to the conclusion that there are few places better adapted to the requirements of an industrious class of immigrants than Calvert county. Capital could, undoubtedly, be usefully and profitably employed in developing the resources.

PRINCE GEORGE'S COUNTY.

Prince George's is one of the leading counties of the State. It area is 480 square miles. According to the census of 1890, the population was 26,080, divided as follows: Whites, 14,-832; colored, 11,245. Its proximity to the National Capital, which it joins on the south, and to one of the largest seaports on the Atlantic coast; its manufacturing industries; its picturesque scenery; its undulating surface; its numerous and abundant springs of clear, cold water; its running streams, tributary to its two grand, historic boundary rivers, make it one of the favored spots in Maryland. Then, add to this its ores and furnaces; its fisheries and oyster beds; its commercial facilities, by its numerous railroads and rivers; its educational institutions, and its prominence as a tobacco-growing country-and any one can see how blessed it is. Its people are hospitable, and its lands are cheap enough to make it a most desirable location for the investment of money for persons desiring a home, and it offers special inducements to people who wish to live in a place which affords such unusual advantages.

Prince George's county is bounded on the north by Howard, on the east by Anne Arundel and Calvert counties, from which three counties it is separated by the Patuxent river, on the south by Charles, and on the west by the Potomac river and the District of Columbia and Montgomery county. Its soil is varied, mostly of loam and sand, mixed with clay, with underlying strata of marl and cemented sand, resembling sandstone.

The people are warm-hearted and genial, and many of them are descendants of the Lord Baltimore party that settled in Southern Maryland. The principal industry of the county is tobacco raising, which is grown in large quantities in the "Forest," just above Upper Marlboro, and in the "tobacco belt," in the lower part of the county. Near the borders of the Dis-

trict of Columbia and on the railroad the large tobacco plantations have been divided up into small truck farms.

The other staples are wheat, corn, rye and grapes. Owing to the decrease in prices of tobacco many of the farmers have given up tobacco growing and are trying fruit raising and dairy farming, in which their efforts have met with great success.

There has been a considerable boom in real estate for some time. That part of the county around Washington by persons desiring suburban residences; and, since the projected railway from the Chesapeake to Washington has started, quite a flurry has been felt in the real estate market in regard to land. This railroad, if built, will add materially to the value of land in the lower part of the county which it traverses, and will open up a portion of the county which is somewhat backward, owing to the lack of railroad facilities. It is a great scheme, and should meet with the approbation of every citizen of the county. By actual count, nearly three hundred houses were erected from Washington to and including Laurel, on the Baltimore and Ohio Railroad, in two years, ending July, 1891. That's a record which goes far to establish the prediction made that in time there will be a continuous city connecting the two cities of Baltimore and Washington.

Much has been said recently about Scandinavian immigration to Maryland, and we are pleased to note that these people find our State offers many inducements. A party of them who have resided in Michigan for the past few years, recently removed to Prince George's county and purchased land near Laurel, only eighteen miles from Washington. We were favored with a call from them lately, and one of the gentlemen remarked: "We are pleased with our new home, and have purchased improved farms, and will soon be established. I can recommend this country to my people, and expect many of my old neighbors will follow me to Maryland."

The tax rate is gradually decreasing, owing to the improvements being erected on the lands. The tax rate is now only eighty cents on \$100, a decrease of ten per cent. since 1888, although the county was at a heavy expense for repairing bridges and roads destroyed by the storms during the year, 1891.

The lands are cheap in the lower part of the county, averaging from \$85 to \$20 per acre. Those in the upper part are much higher, owing to the close proximity to the national capital. They can be bought from \$20 to \$100 per acre.

The county is traversed by three railroads—the Baltimore and Potomac, the Baltimore and Ohio, and the Washington City and Point Lookout Railroad. This last has not been completed, but hands are at work upon it now, under charge of its president. It runs from Brandywine to Mechanicsville.

The school facilities are as good as those of any county in the State. Prince George's has in its limits the Maryland Agricultural College, an academy at Upper Marlboro, under the charge of two efficient teachers; and the public school system throughout the county is considered to be equal to that of any other in the State.

While agriculture is the chief pursuit, the county also has something of a reputation as a manufacturing district. It has a large smelting furnace at Muirkirk, and one of the largest hosiery establishments in the United States, is conducted by Mr. Henry W. Clagett, at the House of Reformation, at Cheltenham, by the labor of the inmates of that institution. He recently made one of the largest shipments of hose that has ever been made in the United States. During the summer, there are a great many canning factories in operation throughout the county.

The Maryland Agricultural College, at College Park, on the Baltimore and Ohio Railroad, is located in this county, and is now one of the best and most successful institutions in the State. The farm is a model one and the College has a full corps of ten professors, besides special instructors and lecturers, and is prepared to give thorough instructions in all "those branches of learning relating to agriculture." Every department is in charge of a competent specialist, secured by a fair salary, and supplied with the latest and best appliances to facilitate instruction. Within a year several thousand dollars have been expended for models and apparatus of the most approved patterns. The last report of the College shows that the institution is gaining in number of students, and in many ways is substantially improved, and better prepared than ever before, to do well the work for which it was established.

HISTORIC TOWNS.

Upper Marlboro, the county seat, is a beautiful little village of about 800 inhabitants, fifteen miles from Washington by the Marlboro turnpike. This town is the oldest in the county. It has two newspapers, both ably edited, three schools and four churches. Laurel, on the Baltimore and Ohio Railroad, midway between Baltimore and Washington, is the largest town in the county and contains 1,984 inhabitants, an increase of 778 since the census of 1880, or 64.51 per cent. Laurel also has several factories, which give employment to many laborers at remunerative prices, a bank, two newspapers, four churches and three schools. It is an incorporated city, and is governed by a mayor and city council.

The old historic town of Bladensburg, known the country over as a once famous place for duels, is a short distance from the District of Columbia, on the Baltimore and Ohio Railroad. It has several good schools and churches, and is governed by three commissioners. It also contains two large flouring mills, whose reputation for the quality of the flour and corn meal produced, is well established. Its population is about a thousand.

The next on the list is Hyattsville, which has been built up in the last ten years from a few scattering farm houses to one of the most beautiful little villages in the country. According to the census of 1890, it has a population of 1,509 inhabitants, an increase of 1,221 since the census of 1880, or 423.96 per cent. This increase is greater than any city or town in the State since the census of 1880. It is well supplied with schools and churches. This town is only a short distance from Bladensburg, and has railroad connections with both Baltimore and Washington.

The dairyman can find no better location for the success of his line of business than is afforded by the lands adjacent to the B. & O., in the neighborhood of Baltimore and Washington. These lands are fertile, well watered, will furnish the best of pastures, and produce large crops of all necessary foods for cattle. A particularly strong point also in their favor is the extremely low prices at which these can be purchased, as the owners have placed them on the market at from twelve dollars to twenty dollars per acre, and will make the terms such as any energetic, pushing man would have no difficulty in meeting. All of these lands are within an hour's ride of either Baltimore or Washington, and are bound to increase largely in value in the next few years. The markets of these cities are the best in the country, and the good dairyman will receive as high prices for the product as he could get in any other city in the Union.

Nottingham is a summer village on the Potomac. Piscataway is a little antiquated town a few miles from the Potomac. It is one of the oldest towns in the county.

The facilities in Prince George's county for manufacturing purposes are equal to those of any other county of the State, and industries are on the increase, as the many canneries that have been started of late will attest. The communication with the outside world, both by rail and water, are easy and at

all times accessible, as the Baltimore and Ohio Railroad runs through the upper and the Baltimore and Potomac through the lower part, while the balance of the county is drained by the Potomae and Patuxent rivers. No portion of the State offers better inducements for a class of thrifty immigrants. The soil is kind, the climate good, and nearly every product known to this section of our country can be grown with profit. Especially is this the case with fruits and vegetables. There is now a growing tendency towards the extensive cultivation of the peach, and with the fact in view many large nurseries have been started. The time is probably near at hand when this county is destined to rival her Eastern Shore sisters in the growth of this delicious and profitable fruit. The soil is well adapted to the peach, and wherever tried this fruit has succeeded well. The great want is an honest, industrious immigration.

CHARLES COUNTY.

Charles county, which comprises the southwestern portion of Maryland, has for its boundaries Prince George's on the north, the Patuxent river, separating it from Calvert, on the east, St. Mary's also on the east, and the Potomac river, separating it from Virginia, on the south and west. The area of the county is 460 square miles. The soil of the county is varied, and presents almost every kind of land known to the State of Maryland. Along the numerous water courses and in the many valleys that run through the county in every direction, a rich loam prevails of a quality best adapted to the growth of grain and fruit, and indeed, when properly cultivated, it will produce luxuriantly anything that the climate will permit. Back on the hills from these valleys is found a rather stiff soil composed of white clay, sand and a small proportion of loam called "white oak soil." Woodlands generally are of this kind also. This is easily improved, and when made

rich produces grass of the finest kind and in paying quantities. In the eastern section of the county and along a narrow belt of the northwestern border, immediately on the Potomac river, is to be found a mixture of sand and loam peculiarly adapted to fruit growing and trucking. This is pronounced by those familiar with such interests to be much the same kind of soil as the most productive of the celebrated Anne Arundel trucking lands. Here and there throughout the county are to be found stiff red clay lands, which, though hardest to improve, if once made rich, are perhaps the most productive. They are certainly the best tobacco lands to be found here. An abundance of marsh marl in many localities makes the improvement of lands along the water courses comparatively easy and inexpensive. Land can be bought at any price from \$3 to \$50 per acre, selling highest along the line of the Baltimore and Potomac Railroad, whose Pope's Creek Branch extends through the county, and near the numerous flourishing little villages that have been built up within the past ten years along its route. The average price per acre in buying farms is from \$10 to \$12. There is much land for sale, owing to a disposition on the part of large landowners to decrease the size of their farms and give more attention to small fruits. Many farms remain in size as before the war, when cultivated by slave labor, and as a consequence necessarily have become more or less exhausted, impoverishing their owners, because, with the poor labor that could be obtained and the depressed market of the staple corps of this section, it was impossible to find the means for improving the land.

The principal products now are wheat, corn and tobacco. Grass is grown quite extensively, and more attention is being given to fruit within the past two years. The soils are abundantly capable of raising fruits and vegetables of every description to be grown in Maryland. Facilities for transportation could not be better. The Baltimore and Potomac Railroad runs through the central portion of the

county throughout its whole length with daily passenger and freight trains. The Southern Maryland Railroad also runs through a portion of the eastern section, while daily boats ply the Potomac and Patuxent Rivers and the numerous tributaries of the former every day, both to Washington and Baltimore.

Farming machinery is being improved as means will permit, but farmers have not as yet been able to make any decided improvement in their live stock. But few thoroughbred cattle and horses are to be found, and one singular drawback to improvement in stock, especially cattle, seems to be a failure on the part of even some of the most practical farmers, to realize that one good horse or cow will serve them more profitably than half a dozen bad ones poorly kept and with but little attention given them.

But few manufactories exist, but there are inducements of various kinds for capitalists to look to this branch of industry.

The amount of general mercantile business transacted in the county annually has been estimated by several trustworthy merchants at about \$700,000. The population in 1890 was 15,191, divided as follows: white, 6,975, colored, 8,215.

Opportunities for industrious immigrants are everything that could be desired. Lands are cheap, easily tilled and quickly improved, while the distances from both Baltimore and Washington, and the ready facilities for reaching either, place them within quick and easy reach of market. The waters abound in the finest fish and oysters, and game of various kinds is abundant. The county seat is Port Tobacco. Marshall Hall, Glymont, Chapel Point and Lower Cedar Point are all in this county, and are perhaps, the most popular excursion points on the Potomac.

INDIAN ANTIQUITIES.

The shell mounds on the eastern side of the Potomac, from Nanjemory to the Chesapeake bay, which was once

included in the territory of the Wicomico Indians, have lately been investigated and disclose many interesting facts. The tribe was first mentioned by Capt. John Smith, who visited them between 1607 and 1610. A full account of them is found in the Journal of Father Andrew White, who came over with Lord Baltimore's first colony.

The shell heaps of the Potomac begin on Pope's creek near Newberg, Charles county. The Clifton shell mound, at this point, covers many acres of ground. Overlying the shells is a stratum of earth from one to three feet deep, which has been under cultivation since 1730, prior to which date it was covered with forest trees. The deposit of shells is from five to eight feet, and is composed almost exclusively of the shells of the common oyster, intermixed with the shells of the hard clam and the tortoise. Bones of birds, beasts and fish are also found. The implements taken from this mound are axes and hammer and stones, which were used in opening the oysters. Fragments of pottery exhibiting a primative sort of glazing and decorated with designs, are found. The most artistic specimens from this locality are in the National Prehistoric and Ethnographic Museum of Rome and the civic museums of Bologna and Ravenna and Copenhagen. Tobacco pipes, a net sinker, a skin dresser, broken knives and arrows have also been found. Pits of ashes or charcoal are frequent. These fires were kindled for the double purpose of preparing food for the hungry fishermen, and steaming the oysters to facilitate their removal from the shells, before being dried and carried inland.

At Lancaster's Landing, on the Wicomico, was obtained an axe worthy of special mention, from the fact that it is composed of European flint. The finding of this axe led to an inquiry on the part of Mr. Elmer R. Reynolds, which elicited the information that in the earliest colonial times an English vessel discharged a cargo of ballast at Laneaster's Landing, and that this ballast was chiefly composed of flint, which had probably been obtained at one of the numerous

chalk cliffs near the English channel. The Indians realized that this flint was superior to the minerals which they had used in the manufacture of their weapons. At an old Indian town at the headwaters of the Wicomico were found polished axes, three finely-finished pestles, one of which was nearly a yard in length, three spheroidal stones used in some original pastime, spearheads, knives, and many interesting beads of stone, bone, shell and glass. The beads were from one to two inches in length, and were symmetrically finished. The glass beads were of that rare ancient type known to archæologists as Venetian polychrome, and were probably from the Muram factory. They were of various sizes, and, as their names indicate, of beautifully interwoven compound colors, among which red, white, blue and green predominated. Pipes of stone and clay, executed after ornate and complicated designs, were also found.

The only human remains of the Wicomicoes were discovered in 1880, in an ossuary on the Potomac. In this sepulchre were the remains of three adult Indians. The pathological condition of the skull of one of these indicated the existence of some extraordinary disease. It was covered with deep pit-like cavities.

The Wicomicoes, as a tribe, sold out their possessions to the colonists and moved away. A few, however, embraced Christianity and remained behind. A majority of these converts and their descendants intermarried with the slave population.

ST. MARY'S COUNTY.

St. Mary's county forms the southern extremity of the Western Shore of Maryland, and has an area of 360 square miles. According to the census of 1890, the population was 15,819, divided as follows: Whites, 8,060; colored, 7,759. It was the first county organization in the State, and its early history is most interesting. Bold, deep waters nearly surround the county, and afford excellent facilities for com-

mercial intercourse. On the east and northeast, the Chesapeake bay and Patuxent river bound its entire length, on the south and west the Chesapeake bay, Potomac and Wicomico rivers are its boundaries. Bird creek and a short line through terra firma separate it from Charles county. Besides being nearly surrounded by water courses of the grandest proportions, it is penetrated by rivers and bays of great beauty, which extend far into the interior. St. Mary's river is among the most noted of these; on its middle course was located St. Mary's City, historically memorable as the seat of the first settlement of colonial Maryland, and the capital of the State. Of this no vestige now remains except the debris that marks the site where it once was. 1891, a monument was erected by the State on its site in memory of Leonard Calvert, the first Governor of the State. St. Clement's bay and Breton's bay penetrate the center of the county. On the latter is situated Leonardtown, the county seat, and largest town in the county.

The county is rolling and generally naturally drained, and even along the water courses there is much diversified surface. The climate is tempered and softened by the large bodies of water around the county, which prevent sudden changes of temperature by acting as reservoirs of heat. The soil, originally fertile, has in many places been worked to exhaustion by the culture of tobacco without any returns being made to the soil by the husbandman. Along the rivers and other water-ways the soil is still productive, and wherever the farming has been judicious, the lands compare favorably with similar lands in other sections. Tobacco and corn are the principal crops, wheat and oats occupying subordinate places. Cattle and sheep do well, but are not raised to any extent. The horses generally are more or less thoroughbred, and some good racers have been raised in this county. Fruit orchards for market are the exception, yet the soil and climate are specially adapted to fruits of all kinds. Point Lookout, at the confluence of the Chesapeake

bay and Potomac river, and Piney Point, about fifteen miles up the Potomac river, have been patronized as watering places.

The capabilities of this county are second to those of no other part of Maryland. The climate and soil admit of the cultivation of all the more important vegetables and fruits, and the waters swarm in season with the finest of fish, oysters, terrapins and wild fowl. When capital intelligently directed develops St. Mary's, returns may be expected in proportion to its many great advantages. Capitalists from a distance who have sought a home and a place for investment of funds in St. Mary's, are much pleased with their new homes, and the returns being made from money spent. One gentleman, after travelling all over the world, looking for a site on which to locate a home, settled on a beautiful plane overlooking Breton's Bay and the Potomac River. He had a steam yacht built in which to examine all the places along the water courses of the United States, and after several years spent in the hunt, decided in favor of St. Mary's county.

He, like other settlers from a distance, has found the soil readily improved. The beautiful site he selected, with water in front capable of floating the largest craft, is but a sample of the innumerable points that may be converted into homes, whose beauty cannot be surpassed by the far-famed villas along the Mediterranean and its adjacent waters. Artesian wells sunk to the moderate depth of 100 to 300 feet give overflow wells, the flow being unceasing summer and winter.

St. Mary's has good steamboat communication with Baltimore, Norfolk, Washington and other points, but is deficient in railroad facilities. Two railroads have been laid off through the county—one running to a point opposite Drum Point, on the Patuxent, at its mouth, where there is a magnificent harbor, and the other to Point Lookout. The roadbeds are made, but rails have only been laid to Mechanicsville, in the upper part of the county, to which point a train

runs daily from Brandywine, in Prince George's county, a station on the Baltimore and Potomac Railroad.

One-third of St. Mary's County consists of uncultivated land, while of the lands under cultivation, fenced in and built upon, there are large bodies that can be parceled out into farms, which, owing to the impoverishment of their owners or their desire to lessen the area under cultivation. may be had at cheap rates. The soil of the county varies in different parts of it. In the northern part it is light and sandy. On the Patuxent, and extending thence, with intervals of poorer soil between, to the Wicomico and the Potomae, it is composed chiefly of loamy clay, naturally very fertile, and still so in many instances. Toward the mouth of the Patuxent, strong white oak soils are found, and these also form, for the greater part, the soils on the bay and the Potomac River. In the middle of the county are the light sandy clay loams, easily and cheaply worked, and admirably adapted to the growth of the cereals, tobacco, fruits and vegetables, the latter of which mature from two weeks to a month earlier than in the truck farms and gardens further north. The fisheries are also valuable, and besides lime, which may either be burned from shells or be had in Baltimore and cheaply transported to a landing, there are old Indian shell banks, shell and green sand marl of fair quality, the refuse of the fisheries, and an abundance of seaweed on the shores, whereby worn-out lands may be renovated. The climate is temperate, the extremes of heat and cold rarely felt for more than a few days at a time, the rigor of winter being mitigated by latitute in part from the milder air of the bay.

THE TOWNS OF ST. MARYS.

In the appearance of its towns and roadside settlements, St. Mary's county presents the contrasts one would naturally expect to find in an ancient community on the verge of a new and more vigorous life. Leonardtown, the county seat, and Charlotte Hall, are each in their way typical specimens of the old-fashioned Maryland village; but Mechanicsville, the present terminus of the Southern Md. R. R., and California, Morganza and a number of other settlements in various parts of the county, look as though they had been taken up from a much younger community and transplanted. They are, however, the product of home industry and enterprise almost exclusively, and their appearance proves that St. Mary,s has within her own borders the elements of prosperity, and in her own people the capacity and energy to improve the opportunities which the influx of capital and labor will some day place within their grasp.

There is a quaint picturesqueness, a distinct flavor of "old-timeness" about Leonardtown which, together with its advantages of situation and its healthiness, make it a delightful summer residence. Many persons go to Leonardtown from Washington, and remain throughout the season, a fact which probably explains the evident prosperity of its two hotels. The appearance of the latter is characteristic of the place. Both are long, low wooden buildings, with dormer windows and comfortable porches, the paradise of idlers o' summer nights. The two buildings confront each other on either side of the principal street-a broad thoroughfare, with a "green" or "common" down the middle. A short distance from them, on the eastern side of the street, is the court-house, of plastered brick, erected in 1831, on the site of the old building destroyed by fire. An entry in the county records states that the fire occurred on the 8th of March, 1831, and that on the 4th of June, in the same year, a loan was obtained from Robert Gilmor, of Baltimore, and a contract entered into with Ignatius Mudd to rebuild the structure for \$8,510. The corner-stone was laid on the 6th of August, 1831, by Captain George Dent, aged 75, "a patriot of the revolution." The building is roomy and substantial, and is surrounded by an inclosure, in one corner of which stands the jail, a small stone structure.

Almost every Maryland town of age has one or more buildings whose appearance carries one back to the palmy days of the ante-bellum epoch. Solid brick they are, with wide halls, high ceilings and large apartments, some of them wainscoted. Leonardtown has its mansion of this type in Tudor Hall. It is now the residence of Joseph H. Key, and was originally the home of the Barnes family. It is a large brick building, surrounded by a park of noble oaks and commanding an extended view. The estate, which lies immediately about the town, comprises about 800 acres. In this portion of St. Mary's the country is high and rolling. and the site of the town is an elevated plateau, which looks down on Britton's bay, a broad and picturesque tributary of the Potomae. The village, which has a population of between 500 and 600, contains half a dozen thriving stores, two neat churches (Catholic and Protestant Episcopal) and a public hall belonging to the St. Mary's Reading Room and Debating Society. The latter building was formerly a Methodist church, but was purchased about fifteen years ago and converted to its present use. The Methodist congregation now worships in a church about half a mile from the town. The debating society was organized over fifty years ago, and is still in a flourishing condition.

Leonardtown has no fire engine nor bank, although there would seem to be urgent need of both, as the town is mainly built of wood, and is the trade centre of a large section of country. Before the war, a savings bank—the St. Mary's Savings Institution—flourished, but since the war, it has not been revived. Although the nearest railroad station, Mechanicsville is some sixteen miles distant, and the town, like the greater portion of St. Mary's, is practically dependent upon river transportation, considerable business is transacted, and from the general appearance of thrift and industry, with which a stranger can scarcely fail to be impressed, it is safe to predict that with the advent of the railroad, Leonardtown will commence a rapid and vigorous growth.

An illustration of what may be expected to follow the completion of the Southern Maryland Railroad is afforded, in a small way, in the appearance of the bustling little town of Mechanicsville, which sprang into being a few years ago, and is now a thriving little village, growing all the time. Its one hotel bears the singular name of the "P. K. House." What the letters stand for nobody seems to know, and the only explanation given of the choice is that it was a whim of the builder. On a sign in front of the house is printed in bold letters the sentence, "As we travel through life, let us live by the way," a bit of advice to which point is given by the fact that the proprietor combines with the trade of mine host the manufacture of coffins. There are several very pretty cottages in Mechanicsville, and the general appearance of the place is that of an energetic, bright and pushing little town. Not less enterprising in their way, are the hamlets which have sprung up in the wake of the sawmill at various points in the county, some of which, on the completion of the railroad, will doubtless develop into flourishing towns.

Three miles northwest of Mechanicsville is Charlotte Hall, a small village, interesting not only because of the ancient academy there, but on account of its remarkably pretty little church, erected as a memorial of Rev. Hatch Dent, first principal of the school. It is one of the most picturesque and attractive specimens of church architecture to be found in any part of the State. Charlotte Hall school has been brought to a high standard of efficiency under the present principal, Mr. William T. Briscoe, who has been connected with the institution for many years, and his assistants, Messrs. Edward T. Briscoe, R. W. Sylvester and G. D. Lancaster. It now has on its rolls eighty boys, varying in age from 9 to 20 years. The school is distinctively a Southern Maryland institution, but has a number of pupils from Baltimore and Washington, and from various points in Pennsylvania. It is managed by a board of twenty trustees-ten for St. Mary's and ten for Charles county. Thefirst meeting of the board was held on the first of July, 1774, and among those present were Gov. Plater and Dr. James Craik, afterwards a distinguished surgeon in the continental army and the intimate friend of Washington. It was held at the present site of the school, then known as-Cool Spring, from a spring which still enjoys a local celebrity on account of its medicinal qualities. The revolution coming on put a stop to all further proceedings, but after the war the project was revived and the school established. All the buildings now in use are comparatively modern, with the exception of one, erected in 1803, but their appearance is quaint and old-fashioned—especially the one-story hall containing the recitation-rooms and library. Many distinguished Marylanders have been identified with Charlotte Hall as members of the board of trustees, and among the signatures to the oath exacted of them, may be found those of Roger B. Taney, Bishop Claggett, and three Governors of Maryland-George Plater, James Thomas and Joseph Kent. In the oldest record-book of the academy is inscribed the form of oath under the colonial government, professing allegiance to Great Britian, which has been marked out by some patriot hand—the same, probably, that wrote the oath of allegiance to the new State of Maryland, which appears just beneath. Founded almost amid the storms of the revolution, Charlotte Hall is still what its originators intended it to be—an academy of high grade and in its vigorous old age it continues to redeem the promises of its youth. Its influence for good on the people of Southern Maryland from generation to generation cannot well be over-estimated.

TIDE MARSHES IN MARYLAND.

The United States Department of Agriculture, in May, 1889, issued an interesting report on the tide marshes of the United States, collated and prepared by D. M. Nesbit, of Prince George's County, Maryland. By direction of the

United States Commissioner of Agriculture, the report was prepared from an agricultural standpoint. The following comprises that portion of the report treating of the tide marshes of the State of Maryland:

The riparian laws of the State are few, and they only reflect or reiterate the general principles of common-law riparian rights. The decision of our Courts have, on this subject, been confined to rights between neighbors and to the navigation and extent of ownership of water-courses and rivers between opposite counties, or citizens of those counties.

There are many large tidal marshes in the State, the reclamation of which would be very beneficial to the public health, and add millions to the general wealth. I know of and can learn of no individual or association "largely (or in any way) engaged in reclaiming or owning considerable tracts of reclaimed land."

Thousands of the most fertile acres could, with little comparative expense, be brought into the highest state of productive cultivation. Many persons own and pay taxes on tidal marshes, which, in their present condition, are rather nuisances than sources of profit, but if reclaimed would be far more valuable than the adjoining cultivated upland. This is a matter which opens a wide field for investigation, and is suggestive of great wealth, now hidden and useless.

Worcester County. Worcester county occupies the coast of Maryland from Delaware to Virginia, a distance of 40 miles, and is the only county in the State that touches the Atlantic. It is protected from the wash of the ocean by a sand ridge, between which and the mainland are several bays, forming a continuous water-way from one to six miles wide, with but a single permanent outlet in the county to the ocean. There are many thousand acres of tide marshes on the mainland, bay shores and creeks, none of which have been diked. Aside from the general causes which have

retarded improvement in Maryland, the tidal action in these bays is not sufficient to secure drainage through sluices for marshes that are near the level of mean high water; a condition which will preclude reclamation not based on the use of machinery for elevating the drainage water. There are marshes in the southwestern part of the county, on the Poeomoke river, to which this objection does not apply. These are in all respects similar to marshes in the adjoining county of Somerset.

Somerset County. The marshes of Somerset are estimated at twenty-five thousand acres. Unlike Worcester county, the tidal action is sufficient for drainage, but little has been done to improve the marshes, and no remarkable features are presented. The unimproved marshes are valuable for taxation at 25 cents per acre.

Wicomico County. The marshes of Wicomico, amounting to several thousand acres, are mainly on the Nanticoke river. No reclamations are reported.

Dorchester County. On the Nanticoke river, from head of tide to Nanticoke Point, in Dorchester county, are 5,000 acres of tide marsh, at a general elevation above low water of $3\frac{1}{2}$ to 4 feet; the common rise of the tides is 3 to $3\frac{1}{2}$ feet; the highest storm-tides rise 6 feet. The marshes are used for grazing; none are improved. They are valued at \$1 to \$5 per acre, and upland from \$6 to \$30.

The mud flats and low marshes in this section produce wild oats, and lower down the Nanticoke river other grasses, some of them making pretty good hay for stock and packing. The marshes are of very little value; upland from \$5 to \$20. Many years ago an attempt was made on the Nanticoke above Vienna to reclaim land for rice and cotton. This was abandoned, and no effort has been made for a half century or more. The majority of landowners in the lower Nanticoke and Fishing Bay, busy themselves catching oysters, muskrats and otters, and take but little interest in the improvement of land.

Caroline County. There are in Caroline county 500 to 1,000 acres of tide marsh on the east side of the Upper Choptank. This land is used only for grazing, and is valued at about \$2.50 per acre, while upland is worth from \$10 to \$25. It is at a sufficient elevation above low water to afford perfect drainage, and is not subject to very high stormtides. None is diked.

Talbot County. Talbot county has a large frontage on tide water and contains many thousand acres of marsh land, which might be reclaimed at a moderate cost and made very valuable. Notwithstanding the favorable location, good quality, elevation above low water and freedom from stormtides, none has been diked.

The general elevation of the marshes above low water is about five feet. Common tides rise about three feet and storm-tides about two feet higher. The marshes are generally owned in small tracts. They are chiefly alluvial, six to eight feet. The vegetation is a coarse cane grass, reed, flag or eat-tail and rush, and is only used as spring pasture. The value of upland is about \$50 per acre, adjoining marsh thrown in.

Talbot county borders on the east on the Choptank and Tuckahoe rivers. These streams are comparatively narrow but deep. The marshes are nearly a mile wide, (average,) growing narrower as you ascend. The courses of the stream are serpentine, with reaches striking first one shore then the other, giving in these bends vast bodies of marsh, which are covered only by storm-tides, the average tide leaving them from one to three feet above. Cattle pasture until June, when the grasses become too rank and hard. They are burned over during winter.

With such treatment as marshes on the Delaware get, they would grow immense crops of corn and timothy. They would not need high embankments. I think this marsh land equal to any in the world. It could never be worn out.

Our salt-water streams, such as Tred Avon, Miles, Wye, &c., have no marsh, but solid shores that afford desirable places for residences, with salt-water luxuries and the finest fruits at hand.

Kent County. The owners of marshes here have no knowledge of the mode of making them valuable. I have in mind at this time a tract of marsh that with \$10 per acre properly spent would be worth \$100 per acre. But there is more upland in this county than is cultivated properly, and, as a consequence, no inclination to reclaim marshes.

Cecil County. The only land banked from the tides in this district was some ten acres of a farm lying on the Sassafras river. On account of muskrats the owners gave it up and let the bank go down some eight or ten years ago. The farms in this section of Maryland (first district of Cecil county) average 300 acres, and those bordering on the rivers especially are cultivated by their owners, excepting several large farms, which contain from 600 to 1,200 acres. There is upland enough, and owners pay no attention to their marshes.

Harford County. There are perhaps fifteen thousand acres of tide marsh in the county. The general elevation above low water is 1 to $2\frac{1}{2}$ feet. Common tides rises $3\frac{1}{2}$ feet; storm tides 1 to 2 feet higher. The marshes are generally owned in large tracts. They are chiefly alluvial, with clay or sand sub-soil, depth about 4 feet. The vegetation is cat-tails and coarse grasses; the latter grazed to some extent. The marshes of themselves are valueless; uplands worth from \$10 to \$25 per acre. No marshes have been reclaimed, and no attempts ever made to my knowledge.

Calvert County. Calvert is a narrow county lying between the Patuxent river and Chesapeake bay, and has tide-water on both sides, with large marsh areas. None have been diked.

Prince George's County. The marshes are formed in the bends of our rivers, and sometimes contain one thousand

acres each. They are owned usually by those owning the lands bordering on them. They are covered by wild oats and other marsh grasses in summer, which fatten cattle very fast. When a farm adjacent to the marshes is sold, the marsh land is generally given in. No marshes have been reclaimed.

Charles County. The vegetation of the marshes is fine three-edged grass, bulrushes, sedge, &c., used for grazing. Sedge is used for covering out-houses, and some sold for bedding and use in street cars. Marshes are worth about \$3 per acre. None have been diked.

St. Mary's County. St. Mary's county occupies the point of the peninsula between the lower Potomac on the south and west and the Patuxent and Chesapeake bay on the north and east. Being nearly surrounded by tide-water, it contains large areas of marshes, all unimproved, and presenting no features of peculiar interest.

The larger marshes have usually a stream of fresh water running through them. They are covered with a coarse grass, which is valuable as pasture in early spring. I have tried peat as a fertilizer on high lands with good results.

Marshes covered with eight inches or a foot of earth from highlands manifest extraordinary fertility.

GENERAL STATISTICS OF MARYLAND.

The Census Bulletins of 1890 disclose the following interesting and valuable statistics of the industries, &c., of Maryland:

COAL MINING INDUSTRY.

The coal fields of Maryland are a part of the extensive basin lying between the Daniss and Great Savage mountains, extending from the Pennsylvania State line through the western section of the State to the Cheat River, near the southern boundary of Tucker County, in West Virginia, and constitute what are known as the Elk Garden Cumberland regions. The George's Creek or Cumberland region of Maryland is located in Allegany and Garrett Counties, and extends from the North Branch of the Potomac River at Piedmont to the Pennsylvania State line, a distance of about thirty miles, although actual mining operations cover only about one-half that distance. area of this coal field is estimated at forty-four thousand acres, of which seventeen thousand acres contain the fourteen-foot vein. In the central portion of the basin, although the thickness of this vein may reach twelve feet, there is hardly a mine in which it can be said that more than ten feet is worked to any extent, while most of them save only seven feet six inches. It has been estimated that the available coal in Maryland amounts to 4,000,000,000 tons. The average annual output in the past five years has been nearly 2,840,000 tons. Should the present rate of mining continue, the Big Vein, Six-foot Vein, and Four-foot Vein would not be exhausted in 400 years. The comparatively large production of coal from this limited area is furnished transportation facilities to the tide water and interior markets by the Cumberland and Pennsylvania and the George's Creek and Cumberland Railroads, which traverse the region, reaching the Pennsylvania Railroad at Cumberland and the Baltimore and Ohio Railroad at Piedmont. The Chesapeake and Ohio Canal, until its partial destruction by flood in 1889, formed an avenue for the movement of a large portion of this product to tide water at Georgetown, District of Columbia.

Mining operations have been conducted in this locality for about half a century. Up to the close of the year 1889, the total shipments amounted to over sixty-six million tons. The coal produced is bituminous, and being essentially a steam fuel, the principal markets have been found at the great manufacturing cities of New England as well as at the seaboard for the coaling of steamships.

During the census year there were in operation thirty-one establishments equipped for the shipping of coal. In addi-

tion, reports were received from forty-nine small operators supplying local trade. The total production for the census year 1889 was 2,939,715 short tons, valued at \$2,517,474 at the mines, or an average of 85.6 cents per ton. The product for the census year ending June 30, 1880, was 2,228,917 short tons, valued at \$2,585,537 at the mines, or \$1.16 per ton. The total number of persons employed in all departments, including superintendents, engineers, mechanics, and clerical force, during the census year, was 3,734, and the amount of wages paid was \$1,730,689. Since March, 1888, the price for mining coal in the George's Creek region has been 50 cents a ton. Drivers are paid \$1.85 a day; laborers, \$1.50 to \$1.85 a day, average \$1.60; carpenters, \$1.75 to \$2.25, average \$2.15; blacksmiths, \$2.00 to \$2.50, average \$2.25; engineers, \$2.50, with a few making \$2.75; roadmen, \$1.93 to \$2.12 a day, average \$2.10. While the price for mining is equal to that in competing regions, the wages of drivers and laborers are less. The average number of days worked when collieries were shipping coal was 196. During the calendar year, 1888, the output amounted to 3,479,470 short tons. This falling off in the output during 1889, as compared with that of 1888, was due not so much to a decline in the demand as to want of transportation facilities, the result of the practical abandonment of the Chesapeake and Ohio Canal. The canal has since been repaired and is now in complete working order.

The shipments of coal from the George's Creek or Cumberland Region of Maryland, from 1870 to 1889, was as follows: By Baltimore and Ohio Railroad, 27,285,325 long tons; Chesapeake and Ohio Canal, 10,532,579 long tons; Pennsylvania Railroad, 4,217,829 long tons; total, 42,035,-733 long tons.

SLATE-MINING INDUSTRY.

Maryland is one of the largest slate-producing States in the Union. According to the census of 1890, the production for 1889 was as follows: There were five quarries producing 23,100 squares of roofing slate, with a total value of \$105,745, being excelled by only three other States, Penusylvania, Vermont and Maine.

The total value of slate produced in Maryland for other purposes was \$4,263, making a total value of all slate produced of \$110,008. The total wages paid was \$65,267; all other expenses in addition to wages \$20,177, making the total expense of producing the entire amount of slate \$85,444. There is invested in slate land, \$257,550; buildings and fixtures, \$15,500; in stock and machinery, \$47,950, or a total capital of \$374,000. All five of the slate quarries in Maryland are located in the Peach Bottom region in Harford county, and the slate produced is said to be the finest in the world.

SPARROWS' POINT STEEL WORKS.

The last annual report of the Maryland Steel Company at Sparrow's Point, says that the Bessemer steel furnaces at that place are capable of an output of 2,000 tons a day, and the rail mill also has a large daily capacity, both mills at present being in successful operation. Several more mills will be erected in the near future, consisting of a plate and shape mill, and a large, open-hearth furnace plant, constructed wholly for delivering the hundreds of varieties of material necessary for ships and in bridge and warehouse construction.

The report gives the town a population at present of no less than 3,000 inhabitants. The estimated number of employees at the works is 4,000, and annually 400,000 tons of various forms of steel are delivered. Baltimore furnishes a large proportion of the employes, and the main proportion of all necessary articles consumed by the inhabitants. Aside from developing Baltimore's local trade, Sparrows' Point has admirably added innumerable dollars' worth of foreign commerce to that port. The necessity of supplying suitable ore for the Bessemer Steel Works has given birth to communication with hitherto unknown ports, and almost

each day vessels laden with ore from Mediterranean ports or Cuba arrive in the Chesapeake.

The co-operation of the company with the Bethlehem Iron Company and the Pennsylvania Steel Company has also greatly enlarged Baltimore's ore importing traffic, much to the gratification and profit of hundreds of business men. Hundreds of families residing in Baltimore are sustained by employment found at the works.

IRON ORE AND GOLD.

The product of Iron ores for Maryland in 1888 and 1889, was as follows:

Maryland and Delaware, for 1880, 127,102 long tons, valued at \$428,244. For 1889, 29,380 long tons, valued at \$68,240. The product of gold from Maryland in 1889, was valued at \$10,369.

PRODUCTION OF PIG IRON AND STEEL.

According to the census of 1890, Maryland produced the following amount of pig iron, being the 13th in rank of States: Completed furnaces, stacks 14; production of pig iron in tons of 2,000 pounds, 96,246, being 1 per cent. of total productions in the country, and an increase of 61.31 per cent. in the State since the census of 1880. The recent building of four large coke furnaces by the Pennsylvania Steel Company at Sparrows' Point, nine miles from Baltimore, to smelt iron ores from Cuba, will bring Maryland more prominently forward as a manufacturer of pig iron. The production of Bessemer pig iron in Maryland, during the census year of 1890, amounted to 77,754 tons, and or steel of all kinds, 1,000 tons.

TRUCK FARMS AND PRODUCTS.

According to the census of 1890, in the district tributory to Baltimore, there was planted 37,181 acres in truck-farm crops, valued at \$3,625,147.50, or \$97.50 per acre. The men employed on these numbered 13,210; women, 1,450; children, 1,690; horses and other animals, 5,265; value of implements used, \$778,094.00. The net income per acre on

leading varieties of vegetables, was as follows: Asparagus, \$87.75; beets, \$80.60; string beans, \$28.70; celery, \$87.75; cabbage, \$96.50; cucumbers, \$27.50; kale, \$47; watermelons, \$42.00; other melons, \$53.50; peas, \$29.50; Irish potatoes, \$68.50; sweet potatoes, \$52.10; spinach, \$37.60; tomatoes, \$34.00.

SEED FARMS AND FLORICULTURE.

There are two seed farms in Maryland consisting of 212 acres of land, with a total valuation of \$32,865, for farms implements and buildings.

There are 102 florist establishments in Maryland, of which 7 are owned and managed by women. The largest conservatory is covered by 60,000 square feet of glass, and the total for all is 872,304 square feet, on 359 acres of land. The value of tools is \$22,285.98, and the total value of establishments \$758,904.48. There are employed in the horticultural establishments of Maryland, 302 men and 45 women, with a total of wages paid to men \$107,814, and to women \$9,720. The plants propagated and sold in Maryland was as follows: Roses propagated 259,592; hardy plants, 183,000; all other plants 2,360,484; total plant sales, \$233,686.30; total cut flower sales, \$265,175.74; per cent. of stock sold at wholesale, 40; per cent. of stock sold at retail, 60.

STATISTICS OF HORSES, MULES AND ASSES.

The number of horses, mules and asses on farms in Maryland, on hand June 1st, 1890, was as follows:

Horses, 130,395; mules, 14,064; asses, 97. Foaled in 1889; horses, 11,855; mules, 209; asses, 32. Sold in 1889; horses, 7,296; mules, 831; asses, 26. Total horses, mules and asses died in 1889, 6,088. The number of horses in Maryland in 1860, was 93,406; in 1870, 89,696; in 1880, 117,796, and in 1890, 130,395, an increase of 12,599 or 10.-70 per cent. over 1880. The number of mules and asses in Maryland in 1860, was 9,829; in 1870, 9,830; in 1880, 12,-561; in 1890, mules, 14,064, asses, 97, an increase of 1,600 or 12.74 per cent. over the census of 1880,

ASSESSED VALUATION OF PROPERTY IN MARYLAND.

The assessed valuation of real and personal property in Maryland, according to the census of 1890, was as follows: Total assessed valuation in 1880, \$497,307,675. In 1890, it was \$482,184,824. The population of the State in 1880, was 934,943, and in 1890, it was 1,042,390. The assessed per capita in 1880, was \$531.91. In 1890, \$462.58, a decrease of 3.04 per cent. The increase of population for the same period was 11.49 per cent.

STATISTICS OF EDUCATION.

According to the census of 1890, the following changes in population and public school enrollment took place in Maryland between 1880 and 1890. The per cent, of gain in population in the State from 1880 to 1890 was 11.49, while the per cent. of gain in public school enrollment was 22.85. In 1880, there was enrolled in the public schools of of the State 149,981 scholars, and in 1890 there was enrolled 184,251, a gain of enrollment in the public schools of 22.85 per cent. The aggregate number of the teachers in the State were 3,826; white male, 858; female, 2,488; colored teachers, 480; male, 207; female, 273. The total white pupils in the public schools was 148,224; male, 76,288; female, 71,936; colored pupils, 36,027; male, 17,932; female, 18,095. The parochial schools in Maryland comprise about 50 Catholic schools, with about 8,000 pupils; 11 Episcopal schools, with nearly 500 pupils, and nine Lutheran schools, with nearly 700 pupils. The private and parochial schools reported to January 15th, 1891, contained an aggregate of 11,153 pupils; total white, 10,878; total colored, 275; white males, 6,548; females, 4,330; colored males, 158; females, 117. Aggregate number of private teachers in the State, 941; total white, 926; male, 630; female, 296; total colored teachers, 15; male, 9; female, 6. Aggregate number of parochial teachers in the State, 236; total white, 230; male, 63; female, 167; total colored, 6; female, 6.

The apparent relation of the sexes in the public schools was male teachers to female teachers nearly as 1 to 2.6; white, 1 to 2.9; colored, 1 to 1.3. The night-schools in the State number 500.

POPULATION OF MARYLAND BY COUNTIES.

- State.	POPULATION.			
	1890.	1880.	Increase.	Decrease.
MARYLAND	1,042,390	934,943	107,447	
Allegany		38,012	3,559	
Anne Arundel	34,094	28,526	5,568	
Baltimore	72,909	83,336		10,427
Baltimore city	434,439	332,313	102,126	
Calvert	9,860	10,538		678
Caroline	13,903	13,766	137	
Carroll	32,376	30,992	1,384	
Cecil	25,851	27,108		1,257
Charles	15,191	18,548		3,357
Dorchester	24,843	23,110	1,733	
Frederick		50,482		970
Garrett	14,213	12,175	2,038	
Harford	28,993	28,042	951	
Howard	16,269	16,140	129	
Kent	17,471	17,605		134
Montgomery	27,185	24,759	2,426	
Prince George	26,080	26,451		371
Queen Anne	18,461	19,257	• • • • • • •	796
Saint Mary	15,819	16,934	0.407	1,115
Somerset	24,155	21,668	2,487	
Falbot	19,736	19,065	671	
Washington	39,782	38,561	1,221	
Wicomico Worcester	$ \begin{array}{c c} & 19,930 \\ & 19,747 \end{array} $	18,016 19,539	1,914 208	

The total population of the State is 1,042,390, divided as follows: white, 824,149; colored, 218,004; Chinese, 197; Japanese, 6; Indians, 34. In 1880, the percentage of white population was 77.51; colored, 22.49. In 1890, it was: white, 79.06; colored, 20.92. In 1850, the white population was 417,943; in 1860, 515,918; in 1870, 605,497; in 1880, 724,693; in 1890, 824,149. In 1850, the colored population was 165,091; in 1860, 171,131; in 1870, 175,391; in 1880,

210,230; in 1890, 218,004. From 1850 to 1860, the increase of white population was 97,975; from 1860 to 1870, 89,579; from 1870 to 1880, 119,196; from 1880 to 1890, 99,456. The increase of colored population from 1850 to 1860, was 6,040; from 1860 to 1870, 4,260; from 1870 to 1880, 34,839; and from 1880 to 1890, 7,774. The per cent. of increase of white population from 1850 to 1860, was 23.44; from 1860 to 1870, 17.36; from 1870 to 1880, 19.69, and from 1880 to 1890, 13.72 per cent. The increase of colored population from 1850 to 1860, was 40.73 per cent.; from 1860 to 1870, 1.55; from 1870 to 1880, 46.40, and from 1880 to 1890, 14.98.

BALTIMORE A SOLID CITY.

ADVANTAGES IT OFFERS FOR THE INVESTMENT OF CAPITAL AND LABOR.

INCREASE IN ALL LINES OF TRADE AND COMMERCE—RAILROAD AND SHIPPING FACILITIES—FINE CLIMATE, CHEAP HOMES AND UNEXCELLED MARKETS—A MANUFACTURING BOOM.

Baltimore's geographical location is that of a great city. She is the nearest port of entry to the interior, is the market for the best and cheapest steam coal in the country, and the natural shape of her harbor is such that the handling of freight in trans-shipment is reduced to the absolute minimum. In the early days of the republic, before the canal and railway had become the highways of traffic, Baltimore was the point where the trade of the interior found its seaboard outlet, and the produce of Pennsylvania, Ohio, and Virginia rolled to its markets over the old turnpike roads. Her people were too enterprising not to perceive the necessity of providing improved facilities of transportation in order to stimulate the growth of the interior and expand the traffic of the port; and the Chesapeake and Ohio Canal enterprise was the first project

for establishing a water route to the interior. The stupendous natural difficulties in the way of constructing a canal across the Appalachain chain prevented the accomplishment of the original plan, while, meanwhile, the Erie Canal, more fortunate in location, was built, raising New York from the position of the fifth State of the Union to the first, in point of wealth and population. It is an evidence of the indomitable energy and perseverance of the people of Maryland, that after fruitlessly expending millions upon the canal, they began the construction of the first railway in the world—the Baltimore and Ohio—' begun in 1827, two years before the first English railway—the Liverpool and Manchester—was opened. The objective point was still the same, as the name of the road signifies—to reach the Ohio river, and thus make an artificial connection between the great river system of the interior of the continent and the seaboard. Had the far-seeing promoters of the scheme been better able to command means, or had the natural difficulties in the way been less formidable, the development of the West would have been controlled in favor of Baltimore. The early railway lines projected in Ohio converged towards the East, in order to meet the Baltimore and Ohio Road pushing its way from the East; but while that road was struggling to cross the mountains, New York was pushing out railway lines, and having a natural route laid out for it by the valley of the Hudson, up to the shores of the chain of the great lakes, it was enabled to reach the West in the North in advance of the Baltimore and Ohio, although its route was the direct one. The local lines of railway that sprang up as feeders, of course, converged towards the North, and the movements of trade was established in these channels long before Baltimore could enter the field of competition. When the Baltimore and Ohio line to the West was completed, the effect upon the trade of the city was instantaneous, and steamship lines from the port to Europe were about to be established, when the war intervened, cutting off altogether the trade of the South, and the principal communication of the city with the West. All plans for further extension towards

the South and West had to be abandoned until after the war, when the original design of extending to the South and West, their shortest lines of communication with the Atlantic, was taken up again and prosecuted with an unwavering purpose, whose splendid results are elsewhere given with fullness of detail. The State of Maryland and the City of Baltimore have subscribed many millions of dollars in aid of these enterprises. To the Valley Road alone, which, before many years, will become the great trunk route to the Southwest, the City of Baltimore has subscribed one million dollars. While the railway system of the city has thus been extended towards the South and West, piers, docks and elevators have been built up around the harbor, in immediate connection with all the railway lines, forming a system of terminal facilities superior in convenience and economy to that of any port in the world. At the same time, numerous lines of steam transportation by bay, ocean and river, have been established between Baltimore and Southern ports, so that by rail and water Baltimore is the nearest and most convenient port for the South and West.

CLIMATE AND HEALTHFULNESS.

Situated in a climate of medium temperature, and in general, free from extremes of heat and cold, with their attendant maladies, Baltimore is not perhaps surpassed by any city of the same population, for healthfulness, taking the average of years. Our brethern of more southern latitudes are enfeebled by continued heats, and those of the North are visited by protracted seasons of cold, whilst, situated between the two, we have just enough of either to counteract the ill effects of the other. To us, inflammatory diseases are comparatively of rare occurrence, and maladies of a bilious type appear in a modified form. In point of vegetable production, Maryland has long been celebrated, not so much for amount as variety. The soil, although in many parts not so fertile as that of other sections of the country, is kind, and returns largely the rewards of good husbandry. In horticulture particularly is this found to

be the case, and it is believed that no portion of the American continent can boast so varied a supply of the more desirable descriptions of vegetables. Many years since, owing to the political troubles in St. Domingo, a great number of French inhabitants were forced to fly for their lives, and in seeking a refuge fixed upon Baltimore as their place of future residence. These refugees were for the most part persons who had possessed large fortunes, and had been educated in the best manner. Bringing with them a knowledge of the culture of numerous vegetables indigenous to the West Indies, they also had the intelligence to adapt the treatment of them to any variation of climate; and thus did we become possessed of many articles of subsistence to which we had previously been in a great degree strangers. The tomato, egg plant, celery, salsafy and other vegetables were then introduced to our markets, and have continued ever since to add to the excellence of our tables, whilst the improved mode of cultivation tended to promote an increase of other plants as well in quantity as in quality. New York and Boston may boast of the excellence of their markets, and Philadelphia of the fine quality of her butcher's meats, but to none of them will Baltimore yield in the excellence of variety of her horticultural products. From the causes above named, our city is always favored in point of vegetables, but within the last ten years, it is believed, is unprecedented within the recollection of our oldest inhabitants, for the richness of its vegetation. On entering one of our markets in the vegetable season, early in the morning, the scene that meets the eye is most gratifying. There are seen the glowing tints of the tomato, the full developement of the cauliflower, and the dark purple roundness of the egg plant, while the commoner vegetables are strewed around in the richest profusion. Nor is this all; the stalls are filled with excellent animal food of all descriptions, whilst the supplies of fine fish, soft and hard crabs, terrapins, &c., are unusally abundant. As if to crown the whole, the quality and quantity of fruits, such as peaches, pears, apples, watermelons, cantaleups, and the various kinds of berries in succession, have been most excellent,

and at such prices as to enable persons of the most moderate pecuniary means to command them. Are not these then just causes of gratitude to the great Giver of all good, who, with a beneficent hand, has emptied, as it were the horn of plenty into the lap of our community? With such mercies, does it not become us to feel thankful, and lift our hearts to the Being who, whilst others of his creatures are permitted to suffer from the gripings of want, supplies our stores with plenty, and drives hunger far from our dwellings?

The population of Baltimore, including the Belt, is about 500,000, and is rapidly increasing. Yet rents are low compared with those of other cities, food is cheap and in great variety, and business is conducted under healthful conditions. Our domestic and foreign trades aggregate about \$500,000,000. and our facilities for transportation by water and rail are unsurpassed. The city's connection with the South gives it exceptional advantages for handling the products of that section, and its position at the head of the Chesapeake makes it the natural shipping point for the traffic of the great West. As a distributive market Baltimore has attained eminence by reason of the enterprise of its merchants, and its excellent railroad communications. Its dry goods, clothing, copper, cotton duck. millinery, straw goods, shirts, drawers and overalls, curled hair. bristles, shoes, lumber, hardware, canned goods, leather, groceries, tobacco, machinery, sugars, coffee, fertilizers, furniture and pianos, go to all parts of the Union. Our manufactured products, which amount to about \$200,000,000 in value, are increasing yearly in volume and variety. Our taxes, withal, are not excessive, and the exemption enjoyed by manufacturing plant lessens, appreciably, the burden borne by our industries. Six railroads centre here, two of which have admirable terminal facilities for the handling of grain and other freight destined for export. Our facilities for receiving and caring for immigrants has already made this port a serious competitor of New York for this branch of business. Our shipping in terests are accordingly flourishing, and we have about twentyfive trans-Atlantic lines that connect us with European ports.

We lack still the ships required to give us our proper share in the South Atlantic coast trade, but the enterprise of our merchants will perhaps give us these in time. Not the least of our industries, it may be added, is the shipbuilding industry, which prospers on account of the low cost of building here.

A GOOD PLACE TO LIVE.

CLIMATE OF BALTIMORE AND ITS SOCIAL AND INTELLECTUAL ADVANTAGES.

As a place of residence Baltimore is equaled by but few cities in this country and surpassed by none. Lying midway between the north and South, its climate has all the advantages of New York or Massachusetts, of Georgia or Mississippi, without sharing in the extremes of temperature to which those sections are subject. In winter and in summer the weather is tempered by the convenient proximity of the Atlantic Ocean, and the city is protected by a long stretch of country and by two ranges of mountains, from the disastrous effects of cyclones or blizzards, which periodically visit the Northwest and middle West. Temperature has as much to do with the growth of a city as any other one cause. The normal man will seek, as a rule, the climate best suited to the best enjoyment of health, and of all mental and physical faculties. The first English comers to this country settled by chance in a section having a climate similar to that of Maryland, and successive immigrants have by natural selection followed that exam-This was the cause of the greater part of the population of the colonies lying towards Maryland and Virginia, and why these sections became the great storehouse for New England. The moderately temperate climate is best adapted to people of English descent, and the general tendency of the man American born is to drift gradually towards the South, and away from regions of fogs, mists, snow blockades, and temperatures below zero.

The average temperature of Baltimore during the past ten years has been 55.7 degrees, the lowest mean temperature in

that time having been 53.5 in 1886, and the highest mean 57.1 in 1881. The mean temperature in 1886, was 54.6. In 1870, the aggregate population of the United States was to be found in sections where the mean annual temperature was from 50 to 55 degrees, and this was the exact case in 1880, after ten years, during which 2,944,695 immigrants had reached this country and had settled largely in States lying north of the latitude of Baltimore, especially in the Northwest, which in itself, without counteracting forces, would have exerted some influence in directing the centre of population towards a lower temperature. But such was not the case, for other foreigners and natives had followed the natural trend of the country between the Atlantic ocean and the Appalachian system of mountains. and have found their way westward through the gaps in the mountains which are situated within one hundred miles north or south of the latitude of Baltlmore, and through one of which the Baltimore and Ohio, supplanting the old National turnpike in 1853, was the first railroad to reach the Ohio river. In 1790, the centre of population was twenty three miles east of Baltimore, which is in north latitude 39 degrees 17 minutes. That was the most northern point recorded which the centre reached, and it is a fact worthy of note that while the centre has in the last century moved nearly five hundred miles westward, its extreme variation in latitude has not been over twenty-five miles, but it has followed the thirty-ninth parallel of latitude with a general southern tendency, which, no doubt, will increase as settlers in the Northwest, finding the climate uncongenial, will move towards the south. These facts not only prove the natural advantages of Baltimore as a place for residence, but also demonstrate that, by its location and its railroad connections, it must control the trade of the great south and southwest, which will continue to increase year by year.

The fourth annual report of the United States Commissioner of Labor is devoted to facts and statistics concerning working women in large cities. In reference to Baltimore the report says:

"The home condition of Baltimore's working women is above the average. Rents are cheap, separate houses the rule,

sanitary arrangements good, and tenement-houses rare, as compared with other cities; markets are excellent and the cost of living low."

In proportion to its population, Baltimore possesses as many aids for working girls as any city in the United States. Allusion is made at some length to the work of the Young Women's Christian Association, and also to various Protestant and Catholic institutions designed to facilitate the providing of homes and home comforts and attractions for working women. A table giving the average weekly carnings of working women in some twenty cities places the figures for Baltimore at \$4.18. Only two other cities have lower figures than Baltimore—Atlanta \$4.05, and Richmond \$3.93.

With such climatic advantages, which are shown moreover in the fact that the death rate in Baltimore in 1891 was lower than any other city in the world, and with the best markets in the world to satisfy man's physical wants, Baltimore possesses other characteristics conducive to his comfort. Situated in a gently rolling country, rising towards the west, the city has every opportunity of extending itself in all directions except where it is confined by the river. Already large towns have sprung up within two or three miles of the present limits, and they, with a thickly-settled country, will eventually be added to the city, and there will be room for further development. Building materials are at hand and house rents are low-extremely low when compared with those of other metropolitan cities. The stranger coming here will find organizations of merchants, business men or private individuals awake to their city's interest, conservative in their methods, conducting their affairs on a safe basis, and prepared to welcome gladly any one who is disposed to unite with them for mutual, individual and general good, and in his undertakings he will have the protection of one of the best city governments in the world.

Within 45 minutes' ride of Washington, at present the political, and destined to be in the future the social and intellectual centre of the country, Baltimoreans have at their own doors all that constitutes culture and pleasure. The

Johns Hopkins University, though young in years, but old in appropriated experience and in the work it has done for science and literature, has a personnel of students and professors cosmopolitan in character, which has earned the attention it has attracted and the praise it has received. A law school, medical, pharmaceutical and dental colleges attract students from all over the country, and a well regulated system of public primary, grammar and high schools, numerous private and parochial schools of a high standard provide a liberal education for all classes in the community. In 1880, the public school houses in Baltimore numbered 59, with an attendance of 35,297 children. In 1890, they numbered 81, with an aggregate attendance of 63,545. The total white pupils were 54,247; male, 27,117; female, 27,130. The total colored pupils were 9,298; male, 4,234 female, 5,064. The aggregate number of teachers in Baltimore were 1,187; total white, 1,171; male, 111; female, 1,060. Colored teachers, 16; male, 3; female, 13. The Pratt Free Library, with its four branches, the Peabody, Mercantile, Maryland Historical Society, Johns Hopkins University, bar and special libraries, meet the demands of the public for literary culture, while theatres, social organizations, and the intercourse of private life, which possess pleasant features peculiar to Baltimore, help to make life easy. And a Young Men's Christian Association, with a large membership and with a flourishing railroad branch, churches of every denomination and several philanthropic societies, meet the needs of persons of more quiet tastes. The city, with all these attractions, will have a steady growth, and those who would enjoy to the full its advantages will be those who grow up with it.

A RELIGIOUS CENTRE.

Baltimore since its foundation has been a great religious centre. No city in the country has played so prominent a part in church 'history. Denominations have originated here, and expanded little by little, until they have attained their present splendid proportions. The people of Baltimore have always

been strongly devoted to religious work, and their worship has been marked by that earnestness and independence which are so powerful in bringing about great results. If we trace the beginning, development and present proportions of the churches, we cannot help marvel at the showing. In the Catholic Church of America, Baltimore has been and is now without doubt the principal see, as it was the first in this country. As early as 1786, Rev. John Carroll, of Baltimore, was appointed the first vicar-general of the Catholic Church in America. Four years afterwards he was consecrated the first bishop, and in 1808, he became the first archbishop. Ten provincial councils have been hold in the Cathedral here and two plenary councils, the second one, in 1866, being the grandest on record. The third council, held in 1890, was one of the greatest events in the Catholic Church. The Cathedral here was the first cathedral erected in America. Then, there have been other events of importance to the Catholic Church. The first order of Redemptorists in the United States was established here in 1850, and the first Catholic seminary for theological students was founded here sixty years earlier. Of the Protestant Episcopals, whose history is largely the history of Maryland and her public men, it is needless to speak. Baltimore is the Mecca of American Methodism. It was in 1784, that the scattered forces of the church gathered here and accomplished the formation of the church in America, with Rev. Thomas Asbury as its first bishop; and it was from this city that its religious efforts radiated. After awhile there were troubles among the members, and the result was the withdrawal of the discontented and the organization by them in Baltimore in 1828, of the Methodist Protestant Church: A further division occurred in 1862, when, in the same city, the Independent Methodist denomination was first founded. The growth of all these churches is phenomenal, and it is almost impossible to compare the handful of Methodists of a century ago with 2,000,000 members to-day, or the little band of Methodist Protestants of a half century ago with the 200,000 to-day. The seed were sowed in Baltimore, and have yielded many hundred fold.

Then there were other churches which began here. In 1774, Rev. William Otterbein organized the denomination of the United Brethren in Christ—a denomination which now has 49 annual conferences and about 160,000 members. In April, 1792, Rev. Mr. Wilmer preached the doctrines of the New Jerusalem Church for the first time. Seven years later Rev. John Hargrove founded the first Swedenborgian Church, and there have been other things of more or less importance which have transpired in this city. Among them was the establishment of the first Sunday schools by the Methodists in 1788, and the formation of the first temperance society in 1840.

These are only the most important of the many great events that have taken place in Baltimore. No reference has been made to the Presbyterians, the Baptists, and other denominations, because very few of their general historical epochs belong to Baltimore; but the instances given show how leading a part the Monumental City has played in the origin and development of large churches.

BALTIMORE MARKETS.

CITIZENS HAVE CHEAP HOMES AND SUBSTANTIAL SUPPLIES

OF LUXURIES.

The quality and quantity of the great variety of food displayed in the Baltimore markets, and the moderate prices charged for the very best articles, never fail to strike a stranger with wonder and admiration. Foreigners especially are impressed with the goodness and cheapness of the Baltimore markets. Englishmen are struck with the profusion of fruits in rich variety, though they seem to expect Maryland to show, in accord with her reputation abroad, the finest peaches in the world. Those who in proper season see the steam boats bringing in the crops of peaches, the fleets of pungies bearing the luscious matermelons and cantaleups of Anne Arundel to Baltimore, and the uncommon tide of strawberries and other small fruits, are convinced that they are in the land of greatest plenty. The impression at another season,

when the millions of bushels of oysters are arriving, and the vast quantities of fish and game are coming in, is not less marked. The canning houses at these two seasons, with their uninterrupted clatter and bustle, tell the stranger of the prolificness of this country. Prices, as a rule, are proportioned to the supply, but always much below the cost of similar articles elsewhere. It is for this last reason that the canning factories are located here, and that Baltimore's canning interests are so great. The goods are largely canned for those sections where oysters, erabs, peaches, strawberries and such Baltimore luxuries are unknown in their natural state, and must ever be obtained from Baltimore because of her special advantages. The cheapness of house rents in Baltimore, when compared with other cities, is remarkable. This holds good with houses of all grades in all parts of the city. The most expensive houses in Baltimore rent for about one-half the prices charged in neighboring cities. Rows of neat and comfortable dwellings of six rooms, with hot and cold water, on nice streets, may be rented at \$10 per month. Houses on good wide streets, in good localities, with back alleys for ingress and egress of rough articles, fuel, &c., with good vards and modern conveniences, may be had for \$12 per Fine dwellings, with baths and every convenience. thirteen rooms, 19½ feet front and lots 136 feet deep, may be had for \$18 per month. Some houses of grand proportions, with yard in rear and front, and everything in proportion, rent as low as \$40 per month. The leader of a New York orchestra moved to Baltimore with his family. In New York he had lived in a flat, for which he paid \$60 per month. In Baltimore he rented a large house for \$30 per month-so large that his wife found it difficult to keep it warm, even by consuming large quantities of coal. She complained of the house being too large, and was staggered when told the price. Later he rented all the house he wanted. with full conveniences, for \$18 per month. Most of those who live in tenement-houses in Baltimore are Poles, and they have the fine old residences in the southeastern parts of the city, on Thames, Fell and other old streets, which at one time formed the aristocratic heart of Baltimore. The Russian Hebrews find Baltimore an inexpensive home. They have a colony on Pratt street, from Central avenue to Jones' Falls, and on the adjacent cross streets. They have numerous stores, where peddlers get their outfits before traveling through the country. The Bohemian colonies in northeast Baltimore, an industrious and frugal class, can testify to economy of living here. These Poles and Bohemians have three large Catholic churches. On moderate incomes they live well, and are making good progress in life. The wealthy, in addition to many other advantages, enjoy in Baltimore more for their money, from all sources, from places of amusement down to their livery-stable, than in any other city.

THE STUDY OF A MAP.

BALTIMORE'S RELATION TO THE COUNTRY SHOWN TO THE BEST
ADVANTAGE.

At first glance, a map of the United States, or a portion of it, is not particularly interesting. But when are studied the direction in which the rivers run, the trend of the mountain ranges, the parallel, intersecting or diverging lines of railroads, and the mighty influence these agencies have exerted on the settlement of the country, and the migration of the people southward or westward, a map furnishes most entertaining food for thought. Take, for instance, any good railroad map, which for convenience, only embraces the portion of the United States, south of the great lakes and east of the Mississippi. It will show clearly, Baltimore's existing relations with those portions of the country which by nature should find an outlet to the rest of the world through this city, demonstrate what has been done to supplement nature with the agencies born of modern inventions, and at the same time call the attention of the wide-awake enterprising merchants and capitalists of the city, and of those at a distance, to the rich harvest awaiting them, would they only put forth their hands and gather it.

Baltimore, by its situation, by its natural harbor facilities, and by its excellent railroad connections, should be the great entrepot of the United States, and its advantages already possessed will be increased to a great degree when the great ship canal piereing the peninsula shall shorten the distance to European ports by three or four hundred miles. The well-earned reputation of the city for building fast-sailing vessels, though fallen into abeyance for some years, is rapidly being regained, and the present generation will see, no doubt, in all quarters of the globe, worthy successors to the old clippers that half a century ago proclaimed Baltimore's fame to the world, and were important factors in the development of this country. with South America, which must increase with years, can be easily cultivated, and increased power in the distribution of native products among European nations, which are looking to America as their great storehouse, can readily be acquired.

Baltimore stands with its face to the south, and with one hand prepared to gather the products of nearly half of the United States and to send them forward to other nations, and in return with the left hand to bestow the peculiar products of the soil of Maryland and her sister States upon those States whose climate will not allow the growth of such luxuries. One iron finger runs almost due north through the rich farming lands of central Pennsylvania and southwestern New York until it touches the great lakes with their ships loaded with grain. Another stretches out to manfacturing Pittsburg, 328 miles distant, the coal, iron and other mineral lands of southwestern Pennsylvania, western Maryland, West Virginia and Ohio, and away out to Chicago, 830 miles, the central point for the grain, hay and other farm products of the great Northwest and the flour of St. Paul and Minneapolis, 1,296 miles from the seaboard. The third finger beckons to the stock-raisers of Kentucky and Tennessee, the active men of St. Louis, 931 miles to the west, and of Kansas City, 1,213 miles away, and bids them to turn towards Baltimore the rapidly-increasing shipments of cattle and cereals from the empire of the Southwest.

The index finger very appropriately follows the lines of the Appalaehian system of mountains, which, ranging from the southwest to the northeast, give an outlet to Baltimore by the natural rift at Harper's Ferry, whose immense water-power, gradually being utilized, must bear tribute to this city. Down through the beautiful, fertile and well-watered Shenandoah Valley of Virginia the finger points, gathering in the profits from the farm lands of the valley proper, the wood and minerals of the mountain slopes, the coal and iron of the southwestern Virginia and southern West Virginia hills and the cattle of their plains, piercing the pine and hardwood regions of western North Carolina and South Carolina, east Kentucky and Tennessee, and finally touching the flourishing manufacturing and industrial centres of the new South, Birmingham, Anniston, Ensley and other towns and cities of Alabama, which have grown rapidly with the development of their natural resources. The broad thumb eovers a fertile section embracing Riehmond, Norfolk, Atlanta, Savannah and Charleston, and some of the finest trucking country on the Atlantic slope, extending from Norfolk to Florida with its orange groves.

Baltimore is determined to let its right hand know what its left hand doeth. One finger of the left hand points to the outside world, and the rest of the hand is busy gathering the peaches of the Eastern Shore, western and southern Maryland, the oysters, water-fowl and terrapin of the Chesapeake and the small fruits of many sections of the State, and in distributing them either fresh or canned, by expresses of fast freights to parts of the country where they are luxuries. Facilities for gathering these harvests are good, and the completion of the new railroad bisecting the Eastern Shore, the road passing through the bay counties of the Western Shore, and the road but lately talked of to run through the rich counties of Howard and Montgomery, and later, perhaps, on through the grazing lands of West Virginia, the production of Maryland's specialties will be increased with the accommodations for transporting them to a steady market.

The West and the South are growing, and Baltimore has the opportunity of controlling the trade between the two sections and of the two sections with the world. The last twenty years have been marked by rapid strides in the South, due to native enterprise and resources, capital from other sections, and improved methods of communication. In many States the plantation system has gradually yielded to intensive farming; and while the cultivation of the staples, cotton, tobacco and grain, has progressed, many large holdings have been divided into small farms devoted to the raising of small fruits, vegetables, grazing of cattle and trucking. It is not necessary to go into details about the coal and iron fields of the different States; the great varieties of woods, with their products of bark for tanning, rosin, pitch and turpentine, the cotton-seed industry, the cultivation of rice, sugar-cane, broom-corn and jute; the bee culture and silk culture, with all the milling and other manufacturing interests connected with them. Railroads are penetrating all parts, having nearly doubled their mileage in less than ten years, and this vast web of iron, Baltimore controls with its fingers, the railroads.

TERMINAL FACILITIES.

RAILROADS LINK THE CITY WITH ALL OTHER IMPORTANT CITIES OF THE COUNTRY.

The railroad facilities of Baltimore are sufficient for all business purposes. There are running into the city five separate broad-gauge railroads and one narrow-gauge road. The Baltimore and Ohio reaches in one direction to Philadelphia, and by its connections to New York, and, on the other hand, enters the great West, Southwest and Northwest. The territory it covers is a most productive one, and includes the States of Delaware, Maryland, West Virginia, Ohio, Indiana, Illinois and Pennsylvania, with direct lines to and through such large cities as Philadelphia, Wilmington, Washington, Pittsburg, Wheeling, Cincinnati, Cleveland, Chicago, St. Louis, and by connections with others of almost as great importance. Its depot is easy of access and commodious, and the facilities

at Locust Point unequaled by those of any other road in any other city. At this place there are accommodations by which freight can be transferred from ocean steamers direct to cars for shipment to other points, and vice versa. The three elevators at the point have accommodations for 3,800,000 bushels of grain. Besides this, the Baltimore and Ohio has a smaller elevator at its Camden Station for 400,000 bushels, making a total capacity of 4,200,000 bushels.

Next in importance comes the Northern Central, the main connecting line between Baltimore and the Pennsylvania Railroad system, as well as a direct road to the northern boundary between the United States and Canada. Associated with the Northern Central are two other branches of the Pennsylvania system, the Baltimore and Potomac to Washington, and the Philadelphia, Wilmington and Baltimore to Philadelphia and the North and East. Over the Pennsylvania system, every part of the country, from the East to the West and from the North to the South, can be reached. The company has two elevators on the Canton side of the river. They have a capacity of 1,250,000 bushels of grain. The company has also on that side of the river extensive wharf property and great facilities for handling and shipping ocean freight, and numerons freight sheds to the centre of the city. The Western Maryland Railroad is essentially a Baltimore institution, having been nurtured by the city almost since infancy. It runs through Baltimore, Carroll, Frederick and Washington counties and covers a section rich in production. The road touches most of the large places in the section through which it passes, notably Westminster, Frederick, Hagerstown, Williamsport, etc., and has connections with the Shenandoah Valley and Reading and North Western, and Baltimore and Ohio Railroads, and further on with the East Tennessee, Virginia and Georgia Railroad, making a direct line from Baltimore to Memphis, Tenn., through a rich and growing country. The Maryland Central is the narrow-gauge railroad, built originally for the local traffic between Baltimore and Harford counties and the lower portions of Pennsylvania, but which with good management may some day develop into

greater things. At present it fills a long-felt want for quick communication between Baltimore and the territory it covers. Taken altogether, Baltimore has terminal facilities equal to those of any large city on the scaboard, and railroads stretching direct or by connection to all quarters of the State and of the country, and several others contemplated or in course of construction. The terminal charges are light, and with differentials in favor of Baltimore this city should prove a most inviting field for manufacturers and merchants. A feature of the many railroads leading out of Baltimore is the incentive they give for suburban residences. All of them pass through a delightful country adjacent to the city, which is rapidly being settled by those who have the means to enjoy the pleasures of the country and the benefits of city life.

The Pope's Creek Branch of the Baltimore and Potomac Railroad extends down through Prince George's and Charles counties. It has also a connecting line, the Southern Maryland, running into St. Mary's county. Among the proposed railroads may be mentioned the Drum Point, running into Calvert county and through intermediate territory, the Baltimore and Cumberland Railroad, and Ellicott City extension of the Catonsville Short Line, the Belt Railroad connecting the Baltimore and Ohio at Camden Station in Baltimore, with the Maryland Central at the city boundary, and thence on to Philadelphia and New York, and the Western Maryland Railroad extension through the heart of the city by an elevated road over Jones' Falls to the old President-street depot, and thence on to tide-water and Steelton, and the extension of the West Virginia Central and Pittsburg Railroad from Cumberland to Baltimore.

The street railway lines of the city form a complete network of available routes, carrying passengers to every quarter at a cheap rate, and show a large increase of mileage over 1880, in which year the number of passengers, as indicated by returns to the city treasury, were 19,000,000, while in 1890 it has increased to 36,000,000. In 1880 the length of line of street railways operated was 61.97 miles; in 1890 this had increased

to 105.81, or an increase of 43.84 miles or 70.74 per cent. In 1890 all the city railways were operated by animal power, but now (1892) one of the chief lines is run by cable, and all the other principal lines are being cabled. Some are also being run by electricity, and other lines are making preparations to operate by the same motive power.

THE HARBOR OF BALTIMORE.

The harbor of Baltimore has about twelve miles of water front measured on the Port Warden's line, and, of course, has a vastly greater length of accommodation for shipping if the extension of wharves is taken into consideration. Situated nearly 180 miles inland from the coast, with which it is connected by the deep and capacious Chesapeake Bay, it must always command a share of ocean traffic so long as water carriage is less costly than transportation by land, and so long as the channels between our wharves and the deep water of the bay are maintained of sufficient depth and width. From the earliest periods of its history, the people of Baltimore have manifested a thorough appreciation of the improvement of the harbor and the approaches thereto from the Chesapeake Bay. As early as 1830, a dredging machine costing \$70,000 was used in removing sediment from the harbor, probably, one of the first used in this country. The application of steam power to dredging machines having been introduced, the city and State, together with the national government, procured in 1852, several machines which were used in the improvement of the river and the harbor, which work has been almost continually kept up from that day to this, as the changes in the size and style of vessels have required corresponding changes in the width and depth of the harbor and channels.

The Patapsco river had originally, between its mouth and Fort Carroll, a depth of about seventeen or eighteen feet at mean low water, which, for many years, was sufficient for the needs of our commerce, when a vessel of 800 tons burden was considered a large ship, and the commerce of the world was carried in sailing vessels. The last quarter of a century has,

however, revolutionized the ocean earrying trade, and, except for some exceedingly long voyages where coaling stations are not to be found, the sailing freight earrier may be called a thing of the past. Moreover, the capital invested in this branch of industry has increased, and with it the inevitable competition and reduction of rates of freight, the size and draft of steamships have progressively increased, as it was soon found that the larger vessels could be operated at nearly the eost of the smaller ones, so that to-day vessels of from 3,000 to 4,000 tons form the bulk of ocean carriers. When, in 1852, it was found that even with vessels then in use, the natural depth in the river was insufficient, and vessels were compelled to have a portion of their cargoes transferred to lighters at Swann Point (distant seventeen miles) before they could come up to the eity, it was decided to open a channel 21 feet in depth and 150 feet wide, which, at that time, was considered sufficient. This improvement, however, was not entirely completed until 1868. In 1872 it was found that to preserve our commerce, a channel 24 feet deep and 250 feet wide was needed, and in 1881 it was found necessary to increase the depth to 27 feet at mean low water, and to increase the width to 400 feet, and now the channels are being widened to 600 feet. It will doubtless not be long before a depth of 31 feet will be required. With all the improvements made by the national government in the ship channels, the city has kept pace with them, so that we have now in our lower harbor 27 feet depth at low water, 24 feet in the middle section, and from 17 to 19 feet in the upper part or basin.

THE INNER AND OUTER HARBOR.

Baltimore has a superb inner and onter harbor, extending from Light street wharf to Fort Carroll, its eastern and western terminus. Its grand advantage over New York and other harbors is the almost entire absence of roughness, and the perfect shelter and safety from storms Shut in from the sometimes turbulent Chesapeake, its surface is almost as ealm and smooth as the placid bosom of an inland lake. Scarcely a

ripple breaks its evenness greater than the vessel's swell, or the splash of the seagull as it laves its wing in the briny bath. Its depth is so great, that the largest vessels can run alongside the wharves and piers, almost into the very heart of the city, and load and unload their cargoes.

Occupying, as she does, a middle position, Baltimore shares most of the advantages of her sister cities to the north and south, while exempt from some of their heaviest drawbacks. Her harbor, as a rule, is open all the year, while she is free from those visitations which sometimes beset our Southern neighbors. Her location has marked Baltimore as a great commercial port, standing at the head of one of the most magnificent bays in the world, whose fertile and populous shores are tributary to her markets, with a land-locked harbor where the fleets of the world may ride safely at anchor, and a water-front of almost unlimited extent. At her wharves and piers may be seen the flags of all nations; her ocean steamships go and come from all the leading foreign and domestic ports. Two of the leading transcontinental trunk lines have here their eastern terminus, in themselves embracing 6,000 miles of road. and over their tracks pass freight cars belonging to every other rail line in North America, thus bringing Baltimore into close connection with every part of the United States and the Canadas.

BALTIMORE AND OHIO RAILROAD TERMINUS.

Not far inside the Lazaretto are two of the most important parts of Baltimore—Locust Point on the south side of the harbor, and Canton on the north side. Both are directly within the main harbor, and accessible to the street car lines. Locust Point is known chiefly for the magnificent elevators and marine terminals of the Baltimore and Ohio Railroad Company. The water view is an imposing one. The company's property has a frontage of fully a thousand feet, and is covered with structures of vast dimensious. To the right are the piers, fitted up for immigrant traffic, with all the facilities for transferring from steamship to train. Baltimore has very great advantages, for handling immigrants, over other cities on the coast.

BALTIMORE'S IMMIGRATION FACILITIES.

The steamers sail close up to the wharf, and the trains which are to carry the emigrants West, back in upon the pier so that they can almost step from vessel to train. At other places transfers are made from steamers to lighters, and it not infrequently happens that families are separated. The baggage is placed on other lighters, reaching the receiving point in great bulk, and endless worry and apprehension follow. The foreigner, in a strange land where his language is spoken by only a few, and where everything is so new to him, is at best to be commiserated. He feels an indescribable loneliness, the memories of his native land tug at his heart strings, and he is in constant fear of losing his family or baggage, if not himself, at ports where several ships are discharging at once, and where it is impossible to prevent these strangers from becoming almost helplessly confused. The strain upon them is very severe, and by the time the emigrant is on the cars bound for the West, he is in such a condition that it is not surprising if he falls an easy victim to sharps and swindlers, who are always lying in wait for him. At Baltimore there can be no such deplorable results, for not only are the immigrants landed directly from the ship upon the wharf, but they are ticketed on the spot, placed on board the trains, and the Baltimore and Ohio interpreters sent with them to the terminus of the road. baggage is claimed and rechecked as it is unloaded from the ship, foreign money is exchanged by an official without charge, and proper food is furnished at a moderate price. Everything is under the personal supervision of the general foreign agent of the company, who delivers all money and letters, cashes orders and furnishes all information desired. foreign languages fluently, and having at his command an experienced corps of interpreters, the immigrant upon landing at Locust Point is among those with whom he can converse and feel at home. More than all this, he reaches this country at a point two hundred miles nearer his destination in the West, and con equently at a lower railroad fare. He not only has the opportunity of crossing the ocean with his relatives

and friends, but has them with him on the train to his destination. But one ship at a time is allowed to anchor at the receiving piers, and, as a rule, the immigrants leave for the West within six hours after they have arrived. The number of passengers arriving at Locust Point weekly aggregates sometimes from three thousand to five thousand. They are largely Germans, Swedes and Scandinavians, and there are very few among them who have not enough money to meet all present emergencies.

THE PENNSYLVANIA RAILROAD'S GREAT BUSINESS.

At Canton, on the east side of the Northwest Branch, and immediately opposite to the historic Fort McHenry, which gave birth to the national song, "The Star Spangled Banner," are located the railroad yards, grain elevators, freight warehouses, coal and steamship piers and docks, and other terminal plant of the Northern Central Railway, by means of which is handled the enormous grain, flour, cattle and other export and import business of the lines of the Pennsylvania Railroad system in Baltimore.

The most conspicuous structures in this plant are, of course, the two grain elevators, whose combined storage capacity is one and a-half millions of bushels. Next in order, and adjacent to Elevator No. 1, come the three covered merchandise piers, with deep intervening docks. The first pier, known as No. 2, is 500 feet long and 70 feet wide. Pier No. 3 is 800 feet long and 120 feet wide, and pier No. 4 is 800 feet long and 110 feet wide. Two lines of railway tracks run through the center of these piers, leaving broad platforms at either side, and the docks being dredged to a depth of thirty feet at mean tide, the largest class of steamships are readily loaded and unloaded.

In addition to this, are two open piers for the landing of lumber, ties and other heavy articles, and a large structure known as the Iron Ore Pier, at which four steamships can discharge simultaneously, and working all three hatches without the slightest interference.

The largest part of the Mediterranean and other foreign ore brought here in the last few years for shipment to the furnaces of Pennsylvania has been handled at this point.

For the handling of this terminal business, and in view of the immense quantity of corn to be shipped abroad by the enterprising grain exporters this season, the company had provided railway track facilities at this point for the storage of nearly two thousand ears.

Adjoining it on the south begins the property of the Baltimore Storage and Lighterage Company, and the Baker, Whiteley Coal Company, on which are built a covered merchandise pier 500 feet long and 10 feet wide, and two bituminous coal piers, one of which recently finished, 800 feet long, 50 feet wide and 40 feet in height, is considered the largest and most complete structure of the kind on the Eastern seaboard. At Boston street, a few squares to the north, are situated the anthracite coal piers and stocking trestles, and when it is borne in mind that the building of all these improvements, representing millions of dollars, giving employment to so many people, and contributing so largely to the extension of the commerce of the city, has been done since 1875; it is very evident that the Pennsylvania Railroad, in the giant strides it has been making in the cities of New York and Philadelphia, has neither been unmindful of the splendid advantages of this port, nor of the enterprise and commercial spirit of its merchants.

STEAMSHIP LINES.

The two principal passenger steamship lines between Baltimore and foreign ports, are the North-German Lloyd and the Allan Line. The first is a weekly line, but often during the busy season has two, three, and sometimes four steamships a week coming in. The ships of this line are magnificent iron steamers, and there can be no more convincing testimony to their seaworthiness than that there has never been the loss of a vessel, nor an accident of consequence since the line was started. The character of the management is such as to insure the kindest and best treatment, and the cleanest and most

satisfactory accommodations. The Allan is a bi-monthly of first-class equipment, and in the busy season its ships come and go with more frequency than the regular schedule specifies. To the left of the emigrant piers is the large slip in which the B. and O. transfer steamer Canton makes her landing. This is the largest transfer vessel ever built, and transfers the heaviest trains without crowding, having three tracks her entire length. Flanking the slip on either side are the enormous B. and O. grain elevators, one alone of which has an actual capacity for the storage of 1,800,000 bushels of grain, and a working capacity of 1,400,000 bushels. It has twelve receiving elevators for unloading cars, and twenty shipping elevators with power to unload five hundred cars in ten hours, and deliver 100,000 an hour to vessels. Double all these figures and it gives a fair conception of the facilities of these three elevators. Back of the elevators are tobacco warehouses, massive structures of stone and brick. Almost numberless tracks reach from Locust Point to the main line, from which radiate other tracks, leading all over the city.

The Fell Street Station is largely devoted to the oyster traffic, which yields an immense revenue to the company, and trains are run daily through to the West on express time, loaded with oysters. To a stranger the vast extent of this business in figures would be almost incredible. The Central Station is for heavy freight, and is of inestimable convenience to the manufacturing interest. East of the elevators are the Columbian Iron Works and Dry Dock, one of the most extensive and complete plants of its kind in the United States. Here are under construction two of the cruisers of the new navy, Nos. 9 and 10, one of which, No. 10, has already been launched, and the other is on the ways, and will soon be ready to follow her twin sister. Busy artisans, with skilled hand and eye, are rapidly fashioning them for their mission, and day and night their vast steel hulls ring over the water with the cheerful music of anvil and hammer, preparing their mighty garb of steel in which they are to make their debut.

At Union Dock are the splendidly equipped steamers of the Merchants and Manufacturers' Transportation Company, the Boston Line, and near them those of the Bay Line. The inner part of the north draw is called the Back Basin, and is a great lumber center. From the foot of South street, covering Prattstreet wharf from Light street to Bowly's wharf, is the space where all the county boats, loaded with oysters, fruit, grain and vegetables, and general farm products, anchor. At the foot of South street are the wharves of the Eastern Shore Steamboat Company, and at Light-street wharf—the final landing place for incoming steamers—the York River Line, the Shriver Line, the Maryland Steamboat Company, the Weems Line, the Chester River Steamboat Company, the Potomac Transportation Company, the Tolchester Steamboat Company, the Choptank Steamboat Company.

THE CITY AS A TRADE CENTRE.

ADVANTAGES OF BALTIMORE AS A POINT FOR THE DISTRIBUTION OF GOODS.

The distributive trade and commerce of Baltimore consists of goods drawn to this city from manufacturers and original dealers, wheresoever located, including those of this city and State, and the products of agriculture from the west and south, and thence distributed throughout this country and foreign lands. While it is a commerce closely related to the industrial or manufacturing interests of the city, yet it is carried on by a different class of men; it is distinctive in itself, natural in its movement, and may be sub-divided into two classes—the internal or domestic trade, and the foreign or export trade, together aggregating about \$500,000,000 annually.

These proportions have been reached by, and are due to, a combination of circumstances. The fact that the city occupies an unusually favorable position for a varied traffic is the principal cause for its having attained the prominent rank of a distributive city of the first class. A glance at the map of the country will show that the coast trends in a north-easterly direction, carrying with it to a remote distance the ports as they appear upon its route, thus prolonging their lines of communication with the interior as compared with Baltimore.

The effect of this is to place the city in closer proximity by many miles than its northern rivals to every grain and porkproducing section of the Union, while every bale of cotton and hogshead of tobacco, with the exception of what is grown in Connecticut in limited quantities, is produced in latitudes upon and below this, and pays the heavier tolls exacted in transit above the city as a consequence of increased mileage, to say nothing of the natural advantage of 300 miles proximity to the centre of sugar production over New York.

It was this principle of proximity and the stand taken by the people of Baltimore in demanding for their city, in consequence of the lesser distance, a lower rate, which induced the advisory commission, composed of Messrs. Thurman, Washburn and Cooley, in the year 1882, to establish deferentials in favor of Baltimore over the cities of Philadelphia, New York and Boston.

Baltimore's growth as a distributive market is also due to the enterprise of its people in developing its natural geographical position, by creating avenues of transportation, in establishing the means of facilitating the interchange of commodities in which they are able to deal, and to provide successfully from its own manufacturing resources, or from those it has acquired, the necessities of the districts from which it obtains its supplies. Dry goods, shoes, lumber, hardware, canned goods, leather, groceries, manufactured tobacco, machinery, clothing, raw sugars and coffee, and all the articles of import, are shipped to every State in the Union, to Canada, Mexico, and the West Indies, the South American States and to Europe, in exchange for coal, grain, provisions, leaf tobacco, iron, oil, eattle, lumber, raw sugars, coffee, steel, together with such other articles as are received from foreign markets.

The relationship existing between those who control the distributive commerce of Baltimore and her avenues of transportation is so intimate as to constitute a very close alliance, and this spirit of co-operation tends largely to promote the growth of the city, and to advance the material prosperity of her transportation interests.

The feeders and outlets are thoroughly efficient, consisting of unbroken railway lines, a service unsurpassed in the world, connecting the city with the territory dependent upon and tributary to it. Its foreign steamship lines are of the best class, and reach all the larger European markets, while its coastwise and Chesapeake Bay steamers have large capacity and are renowned for their elegance and speed. The East, the lakes, the northwest, the valleys of the Mississippi and Ohio, the south and southwest, beyond the Mississippi river, the Golden Gate, Texas and Mexico, and foreign ports, are all reached from Baltimore by an unequaled railway and steamship service. The terminal facilities of the port are unsurpassed on the American continent, and owners of foreign steamers have found that our port-charges and other expenses, especially for coal, are from \$1,800 to \$2,500 less than at other ports.

Houses in New York and Philadelphia, of equal size, rent for much more than is demanded here; water is abundant and cheap, taxes are reasonable, and one can live more comfortably in Baltimore on \$2,000 a year than is possible in New York on \$6,000. The city's interests are diversified, possessing as it does favorable surroundings for the manufacture and jobbing of goods of every description. Its location geographically, as compared with that of other cities, is unsurpassed; its ability to conduct transactions to a profitable conclusion, at less expense than is possible either in New York or Philadelphia, and its facilities for material, labor and transportation and the economies of every day life, are not equalled by any

city in the country.

These great advantages are reasons why it is difficult for rivals to absorb any of the distributed trade, and why Baltimore is to continue to be one of the leading and most prosperous distributive markets in the country. Its merchants are intelligent and progressive, and possess by inheritance the integrity of character requisite for the building up of a lasting trade. Indeed, there is no city in the country possessing more solid comforts and presenting more inducements to those desiring to enter this field of trade than the city of Baltimore.

BALTIMORE'S TRADE OF TO-DAY.

WONDERFUL BUSINESS ACTIVITY—ITS VARIED BRANCHES OF INDUSTRY—STEADY INCREASE IN EVERY DEPARTMENT.

GRAND OPPORTUNITIES FOR THE FUTURE.

All agree that Baltimore is on the threshold of a great and unparalleled prosperity. The coming decade will be a period of advancement and development such as Baltimore has never known before. All the conditions favor it. Nature has blessed the city in many ways, and on such a basal stone no faulty structure has been reared. With \$600,000,000 of wealth and \$500,000,000 of trade, with \$40,000,000 of new buildings in ten years, millions of increase in commerce, and an advancement in all other directions commensurate with these figures, the results of the future are assured. Here are all the elements of success in a greater degree of perfection than exist anywhere else on the Atlantic coast.

Baltimore has reached its present position in the commerce of the world not by any hot-house or mushroom process, not by any clap-trap argument or exaggeration of facts, but by the inevitable force of the favorable circumstances surrounding it, enabling it to offer such advantages for trade and such inducements for capital, that there can be no other result but success.

These advantages are easily made apparent to the skeptical. Baltimore is 152 miles nearer Chicago than New York, 210 miles nearer St. Louis than New York, 246 miles nearer Louisville than New York, and 104 miles nearer Pittsburg than New York. Its harbor and harbor approaches, already unequalled in their actual advantages for commerce, are constantly being improved, and by the sum of \$700,000 which the government is pledged to give for further improvements, will be brought to an absolute state of perfection. Baltimore's facilities for handling business and transferring cargoes are superior to those of the other seaport towns. The Patapsco river and the harbor give it more than forty miles of superb water front for manufactures. Within five years, more than \$20,000,000 have been invested in new industries bordering on

the Patapsco, and the growth in this direction is yet but that of an infant compared to what it will be. Almost numberless magnificent manufacturing sites still remain at prices which make them accessible to moderate capital. These are rapidly attracting outside capital and directing our own financial resources to their speedy and complete development. Within thirteen miles of the Chesapeake bay the largest arm of the ocean, and one hundred and eighty miles of the ocean, the way is opened for the largest ocean steamers, and all the comforts and conveniences of a great city are ensured. Central to the Atlantic coast line of the United States, it has excellent facilities for both foreign and coastwise trade.

Its railway transportation systems afford the means for the receipt and distribution of commodities from and to all parts of the country, which are unsurpassed. Its surroundings are such as to afford cheap and practically inexhaustible food supplies, and it commands convenient access to the coal, iron and timber, textile staples, and, in fact, all the supplies necessary for furnishing materials of the most varied character.

The Canton Company has the best location in the South, and one of the best in the United States, all things considered, for the manufacture of textiles. This is not a "balloon" land company organized to satisfy the selfish greed of a few promoters at the expense of the investing stockholders and town lot cranks, but a legitimate, conservative business enterprise, having been in existence for over sixty years, no less a personage than the late distinguished New York philanthropist, Peter Cooper being its first president. The company owns 2,250 acres of land, partly in and adjacent to the city of Baltimore, and it desires to secure the location of textile manufacturing establishments on its property. The advantages it offers are: First, the location of its property on the deep water of the Patapsco river, its holdings on the water front being the best in the city, covering over 32,000 feet, the depth of the water being sufficient to float vessels drawing twenty-eight feet of water. Second, its property is traversed by the Baltimore and Ohio, the Western Maryland and Pennsylvania Railroad

systems, the latter comprising the Philadelphia, Wilmington and Baltimore, the Northern Central and the Baltimore and Potomac Railroads. All of these railroads are ready to build switches to the door of any factory, giving it unparalleled facilities for reaching direct all the markets of the country. Third, there are now over 30,000 people located on the land now owned by or originally belonging to the Canton Company, and known as Canton. The entire tax rate is but \$6 on the thousand. The elevation is as high as the eity proper, the neighborhood is healthy, and substantial houses can be secured for operatives at a nominal rent. About 2,000 such houses have recently been erected. The cost of bituminous coal mined either in Pennsylvania or West Virginia for manufacturing purposes is but \$2.50, or a little more, a ton. There is no shutting down on account of the weather, as at the North, nor is the expense of heating as great, for the same reasons. Operatives can live more cheaply here, and all the inducements are greater. The North has the advantage of capital, and has experience and an abundance of skilled labor; but the former can easily be removed, and the latter will follow as readily as water flows down hill, if it cannot be produced from the abundance of material already on the ground.

MANUFACTURING ADVANTAGES.

All the natural advantages are with Baltimore. Why, then, should Lowell or Fall River or any other place be more important textile manufacturing centers than Baltimore? There is no reason why this should be so, except fate decreed that woolen and cotton manufacturing in this country should begin in New England, and, of course, the system of labor in the South, to a large extent, kept out of this section many large manufacturing enterprises before the war. But a wonderful change has taken place during the past dozen years. Cotton manufacturing in the South is now far beyond the experimental stage. The total number of cotton spindles in operation in the Southern States in 1887 was 1,465,618; in 1889 it was 1,808,602. In 1879 the number was but 561,360—l ess

than one-fourth of what it is to-day. One of the largest carpet manufacturers is on record as stating within the past year that he was compelled to use Southern cotton yarns exclusively, because of their lower cost, showing that the cruder products of the mills of the South have already taken possession of the Northern market.

In point of water power, Maryland far outranks the State of Massachusetts, and stands second to no State in the Union. In the neighborhood of Baltimore alone, the unemployed power of the Patapsco river and its branches, of Jones' and Gwinn's Falls and their smaller tributaries, and of the Gunpowder and the small streams which flow into it, affords an abundant supply for a very large number of establishments. In addition to this there is a large amount of unimproved power on the Patuxent river and other streams, which, taking their rise in the higher portions of our very hilly State, find outlets at different points on the Chesapeake bay, while the power capable of being supplied by the Falls of the Potomac alone is so vast that beside it the combined powers of Lowell, Fall River and Patterson are comparatively trifling. The canal which runs along the Maryland side of this river, from the Falls to Georgetown, serves in fact as a great race, which can at any moment be tapped at almost any point for a distance of twenty miles, and is capable of furnishing abundance of power to countless mills, for the erection of which, between the canal and the river, there is abundant space. Could this be converted into a vast manufacturing region, it would not only contribute directly to the wealth of the State, by the large rent which would be paid for the use of the water power, but indirectly, by creating a market and demand for agricultural supplies from that section, through the influx and settlement of a large manufacturing population. sources of our coal fields, the superior quality of the Cumberland coal and its great adaptability to many branches of manufactures, especially those of metals, are very generally known. The fact that large quantities of it are constantly shipped to the New England States, is sufficient proof, if any

were needed, of the great importance of this valuable source of our wealth. Proximity to the coal beds affords to the manufacturers of Maryland manifest advantages over those of other States, who, to the original cost at the port of shipment, have to add the additional cost of transportation. In addition to these most striking advantages, the mildness of our climate, the comparative shortness of our winter, and the large agricultural resources of our State are all matters of evident importance. They enable the operatives to support themselves and their families at a less expenditure than is required at the North, and, as a natural consequence, greater cheapness of labor, must be the eventual result of greater cheapness of living. Still another advantage, confined chiefly to the manufacture of cotton, which is, however, a very large and most important interest, is our greater proximity to the place of production of the raw material. Our advantages over the New England States, as a manufacturing point for the Southern States are of so marked a character that they will, when carefully examined, be at once comprehended; and should induce northern capitalists and manufacturers especially, to invest in this State. In so doing, they would run no possible risk. They would have no difficulty in competing successfully in all those markets with which they had the nearest and most direct communication.

In the establishment of woolen and worsted, hosiery and kindred manufactories in Baltimore, manufacturers could secure their raw materials from the South, and West Virginia and Ohio, over two trunk lines of railroad; cotton, jean, satinet and the like manufacturers can secure cotton by direct line of steamers from the largest cotton ports in the United States, and there would be no difficulty whatever in securing the necessary white female help here. The population of Boston, the home of so many of these industries, is only a few thousand behind that of Baltimore, and if Baltimore keeps up the record she has made in the past ten years, she will outstrip Boston by 1900, having gained 102,126 since 1886, while Boston can boast of an increase of but 85,639 in the same time.

TRADE AND COMMERCE.

In the quantity and variety of business, the city's commerce is now the greatest in its history. Figures show an enormous increase and the growing greatness of Baltimore's trade. Even in a comparison with 1881—a year of great activity—the commerce of Baltimore shows an increase of more than \$17,000,000. Baltimore is, by far, the most convenient and safest port for immigration in the country. Its facilities for the eare of the new population are unequaled, as there is direct communication from the ships to the cars.

The products of the west find here their shortest route and most accessible shipping point on the Atlantic, making it the natural outlet for the productions of that great agricultural region. For foreign fruits and the products of the West Indies and South America, it is mearer by twenty-four hours than Philadelphia and by forty-eight hours than New York, while its railway facilities for distributing these goods in western markets are unrivalled. In the benefits of reciprocity with the South American republies, Baltimore will largely participate. It is more closely allied with Brazil, which comprises one half of South America, than any other North American port. The fact that the first steamship line to Brazil, under the reciprocity act was started from Baltimore is a sufficient guarantee of what may be expected in the early The activity and enterprise of our merchants and manufacturers is an evidence that they are thoroughly alive to the opportunities of the present and the possibilities of the future. The ability of our market to successfully compete for trade has been demonstrated beyond question.

In all respects the city is on a solid basis for unlimited growth. Its annual business for manufacturing trade and commerce for the year ending January 1, was \$500,000,000—an extraordinary total, which is made up by thousands of industries and transportation agencies, reaching to all parts of the world. During the past ten years the results of its progress have been enormous. Many of the manufacturing enterprises have doubled and trebled their size and product. In the com-

mercial and distributive trade the advance has been unprecedented, and the total for the fiscal year ending June 1 was the enormous sum of \$260,000,000. In the past ten years 20,000 buildings have been erected, representing \$40,000,000 of investment and more miles of street railway have been built than in any eastern city. Educational facilities and accommodations have kept pace with the advance in other lines, and the increase has been at least fifty per cent. Outside the city limits more than \$10,000,000 have been invested in manufacturing plant. The extension of the city's commerce, both domestic and foreign, has been so great that it has made Baltimore the second port in the United States. Since 1885 the commerce of the port has increased from \$45,944,959 to \$97,344,746, an advance in six years of \$51,399,787 or more than double. During the same time the custom-house receipts increased more than sixty per cent. The increase of foreign exports of 1890 over 1889 was \$2,000,000, greater than the combined increase of New York, Boston and Pliladelphia for the same period. The foreign exports from Baltimore in 1890 were valued at \$72,000,000, against \$62,000,000 in 1889, an increase of \$10,000,000, while the combined increase from New York, Philadelphia and Boston for the same year was less than \$8,000,000. One third of the total increase in exports in 1890 from the United States was made from Baltimore.

The immigration in the past year was 48,274, against only 29,670 the year before. The ship building interests have been restored, and some of the finest work in ship building is being done in Baltimore.

Baltimore has the finest coastwise trade of any American port, with an aggregate of nearly 6,000,000 tons, extending along the Atlantic seaboard from Maine to the Gulf of Mexico and along the Pacific coast to San Francisco. The inland commerce has shown still greater growth. Ten railroads connecting with the railroad systems of this country, Canada and Mexico, reach this city, and are constantly extending their connections and opening up new territory. The railroads handle for Baltimore the tremendous total 20,000,000,000 pounds of

trade annually, an increase of forty per cent. since 1881. All these things show beyond all dispute the value of Baltimore's position. Fifty six per cent. of wheat, seventy-six per cent. of corn, every bale of cotton and every hogshead of tobacco, except the small crops of Connecticut are grown on and below Baltimore's parallel of latitude.

Maryland's soft eoal industry is one of the greatest in the state. The benefits of this vast trade are far-reaching and extend from the miner through all the diverse avenues of trade. The semi-bituminous mines are in Allegany and Garrett counties, the famous Cumberland coal region. This trade has increased from 1,708 tons, the first shipment over the Baltimore and Ohio Railroad in 1842, to 4,000,000 tons, the maximum production in 1890. The Cumberland coal region is remarkable for the fine quality of the coal and the size of the vein. Although the largest shipments are by water from Baltimore to New York and New England ports, a market has been recently opened up to the ports along the coast as far as Florida and to the islands south of the United States, and occasionally a large eargo is sent around Cape Horn to California. The outlets from the mines are the Baltimore and Ohio, the Cumberland and Pennsylvania and the George's Creek and Cumberland Railroads and the Chesapeake and Ohio Canal. The total shipment from the mines since they were opened in 1842 have been 66,643,835 tons, and the amount of capital invested there is \$30,000,000. Baltimore is the selling and shipping point by water for a large quantity of bituminous coal from the northeastern part of West Virginia. Most of it is brought to Cumberland and from there shipped over the lines of the Pennsylvania Railroad to Philadelphia and the rest of it by the Baltimore and Ohio Railroad to Baltimore, whence a considerable quantity is sent to New England ports. An immense quantity is also shipped to market by the West Virginia Central and Pittsburgh Railroad, which has obtained a charter to make it an independent line to Balti. more. The coal from the new coal fields in West Virginia, south of Fairmount, which are being opened by the help of

Baltimore capital, is mostly shipped from Pittsburg west, but it is moved by Baltimore railroad companies, and a large part of the profits from the freight, as well as the sales of coal and coke, come to Baltimore.

GUANO AND FERTILIZERS.

Baltimore is the pioneer city in the guano and fertilizing business, and the value of fertilizers has caused their manufacture and distribution to become a most important branch of the trade of Baltimore. For many years Baltimore was the only port in the United States for the importation and sale of Peruvian guano, and it has, by its superior facilities, increased its hold upon the industry. All varieties of fertilizers known to the trade, and likely to be beneficial to any known land, can be purchased in Baltimore. Along the harbor and shores of the Patapsco are the various fertilizing works, having a combined capacity for an output of about 200,000 tons a year, with annual sales exceeding \$3,000,000. One of the chief causes of the successful manufacture and sale of fertilizers here is that the dealers have held close to an honest policy, and have studiously refrained from any imposition upon consumers. No Baltimore firm, in the history of the trade here, has ever been found guilty of any deception in the line of their business. The industry employs thousands of workingmen. Vessels of all sizes, scows and tugs, are required constantly to carry on this vast business, while the tonnage carried by the railroads in this one line is an enormous element in their freight receipts. Baltimore supplies Maryland, Pennsylvania, Virginia, Ohio and other states, the trade extending to the gulf. Every day there is a busy scene in and around the works and at the wharves where this business is handled. Nearly the entire Navassa production comes to Baltimore and is utilized by the city trade. This is one of the many evidences of Baltimore's great consumption of raw material, and a correspondingly large output of finished product.

CANNING INDUSTRY.

No single interest in Baltimore is better known than the packing industry. In the amount of its capital, the excellence

of its work, the extent of its ramifications and the general reputation of its houses, it occupies a leading place. The Baltimore canned oyster is know wherever civilization reaches, and its fruits and vegetables have a fame as well earned and as far-reaching. No other city compares with Baltimore in the abundance and quality of its canning resources. The richest ovster territory in the world has it for its market. The finest fruit and vegetable area in the United States is within five hours of its depots and wharves, and immediately surrounding it is a country abounding in magnificent orchards and small fruit and truck farms. With all these advantages at hand, it is unavoidable that Baltimore must supply more canned goods to the world than any other city engaged in the canning business. Baltimore packers have done more to protect the quality of canned goods than all others. They have secured the passage of laws, agreements, and trade-marks, to protect the pnrchaser against fraud and misrepresentation, and they have given the trade a standing which is recognized everywhere. Their work in the establishment of honest standards is appreciated all over the United States, and the consequence is that Baltimore canned goods are always what they are represented to be, and accepted without question as being fully up to all that is claimed for them. The canning industry has grown enormously in the last twenty years, and now aggregates an annual business of \$22,000,000 to \$25,000,000, and pays good wages to about 15,000 hands. This great industry has given Baltimore the leading place in the manufacture of tin cans, more than 50,000,000 cans being made in the city each year. Some establishments employ more than a 1,000 hands in busy seasons.

AS A FLOUR MARKET.

The location of Baltimore as the center of a belt of country remarkable for its fertility makes it a market of the greatest availability for produce of every kind. The farmers of Western Maryland join with the tobacco planters of Southern Maryland, and the truck-farmers of the Eastern Shore and Virginia, in sending the products of their labor to Baltimore

to be disposed of. The productiveness of this extensive region and the cultivation of diversified crops in the section contiguous and tributary to this market, have made Baltimore the receiving and distributing point for dairy products of every sort. The farms, dairies and orchards of Virginia and Pennsylvania always find this their best market. The grain trade is always increasing, and additional facilities of all kinds are constantly being provided, commensurate with the business done.

Few branches of the commerce and industries of this city show greater activity, and none has achieved a more marked prominence in the aggregate, than the flour trade. In this department, Baltimore is the center, both of production and distribution, and the home of important milling enterprises. The leading mills are of large capacity, and in their equipment combine every modern improvement for the manufacture of flour of a superior quality. Maryland wheat is peculiarly suited for the production of fine export flour. The local output of this grade is very large, and by its sustained superiority of quality, brings the highest prices in foreign countries. Thousands of barrels of flour are shipped from Baltimore to all sections of the United States, and about 2,500,000 barrels were exported, in 1891, to England, the Continent, the West Indies and South America. Brazil is one of the largest customers of the Baltimore millers and wholesalers, and this export of flour tends to promote the interests of the city in increasing its trade with that country, and in the increased activity in the importation of coffee and other Brazilian commodities as return cargoes. The export flour trade of this city is by no means confined to the shipping of the home product, as many of the mills of the great northwest, are finding in Baltimore, their most convenient shipping point for reaching the best foreign markets. The receipts each week cannot be averaged. but the total quantity of flour in barrels and sacks, both imported and of home manufacture, amounts to large figures at the end of the year. Cargo upon cargo of flour is shipped from Baltimore to South America each month, and the amount

exported to England and the Continent is of heavy and constantly increasing proportions. In 1891, there was exported from the port of Baltimore, 2,736,153 barrels of flour. Grain cargoes go from here each week, both in steam and sailing vessels. This export business is capable of wonderful expansion, and the fact that Baltimore is the nearest Atlantic port accessible by rail from the most productive regions of the west, is one that assures expansion in that direction. In mill-feed, corn, hay and oats, there is an active local trade, and business in this line is in a healthy condition.

The transactions in foreign fruit are of steadily increasing volume, and the annual importations are large to this market. Two lines of steamers run regularly between Baltimore and the West Indies all through the year, bringing every variety of tropical fruit. The oyster question is one of the most important and interesting to the city and State. It is, by far, the largest industy in the State. Thousands of people and hundreds of boats are engaged in the business, and the revenue derived amounts to millions of dollars annually. Besides being the center of a productive truck country, Baltimore is, by its natural advantages, one of the best fish markets in the country. Maryland shad, rock, perch and other fish are famous all over the eastern country. The Susquehanna Flats are the best fishing grounds near the city, but the big hauls are made in the Potomac river. All the tributaries of the Chesapeake send their eatch to Baltimore for market, and, next to the oyster industry, this is the largest in the counties bordering on the bay. It will thus be easily seen that the products of the soil and of the water find in Baltimore their most available and advantageous market. Nearly the whole south draws its supplies from Baltimore, and the city commands, besides, the bulk of the wholesale trade south of Mason and Dixon's line, a large and increasing portion of the northern, eastern and western trade.

MANUFACTURING INDUSTRIES.

The manufacturing and productive interests are very much diversified in character. Over seventy-five per cent. of all the

cotton sail duck manufactured in the United States is produced by Baltimore mills, and it is safe to say that sixty per cent. of all the cotton duck used in the world is made in the State of Maryland. There are over twenty factories in and contiguous to Baltimore, and operated by Baltimore capital. These mills run about 2,500 looms, with about 150,000 spindles. They employ 5,000 or 6,000 people, male and female, and \$1,500,000 or more annually, is paid out in wages. The raw material used, over 80,000 bales of cotton, is worth from \$4,000,000 to \$5,000,000, while the annual product aggregates between \$7,000,000 and \$8,000,000. This product is supplied to all parts of the United States, and is shipped largely to foreign countries.

Baltimore is now the largest ready-made clothing manufacturing city in Americo. There are about 40 wholesale houses, with a capital of \$6,000,000, who give employment to at least 13,000 people. Their annual sales amount to about \$15,000,000. The value of the material used is over \$8,000,000, and about \$3,000,000 is paid out in wages. This business is constantly increasing, and the standard of excellence is not surpassed elsewhere. The facilities for producing at a minimum cost chiefly because the expense is smaller here than in other cities, enable Baltimore dealers to hold their own against the strongest competitors. This is so to such an extent that large quantities of the manufactured goods find their way to New York and to the sources of the raw material.

To illustrate the growth of this industry, the manufacturers of clothing produced in 1880, \$9,000,000 of goods and in 1890, over \$14,000,000. The firms engaged in importing and jobbing cloths, cashmeres and vestings are capitalized in the aggregate at \$1,000,000 or more, and do four times that amount in business. The retailers also do a business of several millions on a capital of about \$1,000,000. The dry goods interest is universally recognized as the leading and most important branch of mercantile business in the city. One house alone has a trade of more than \$3,000,000, and another of over \$2,000,000, while a number of others range in their trans-

actions from \$1,000,000 to \$2,000,000. This trade and the allied branches of dry goods, commission, white goods, notions, etc., aggregates \$34,000,000. There are more than ninetythree firms with a capital of \$12,000,000 engaged in the dry goods and notion business. These employ an army of people, and the wages amount annually to over \$1,250,000. The retail stores alone do a business of over \$5,000,000, and the commission agent does a large share of the business. The millinery and white goods wholesale trade is one of the largest of any city in the country. The eight or nine firms here, with a capital of about \$1,000,000, do a business in all parts of the United States that reaches \$4,000,000 or \$5,000,000. In the millinery trade about forty per cent.—which includes hats, bonnets, flowers, feathers, ribbons, silks, velvets and various trimming goods—is imported, while sixty percent. is of domestic manufacture.

The manufacture of shirts, underwear and overalls is a most active industry and the largest in the United States. Skilled hands are employed, and in several of the shirt factories employment is given to hundreds of men and women. There are about thirty-five factories engaged in the manufacture of these articles, and a number that make women's underwear and corsets, who employ about 6,000 hands. The estimated aggregate of production in these two lines is about \$6,000,000. Within the past ten years these industries have more than doubled their capacity, as well as their output. From \$1,000,000 in 1880, they produced over \$4,000,000 in 1890. Notions of almost every conceivable kind are manufactured in Baltimore. The various lines of manufacture and trade in this class are represented by houses of large resources and widespread reputation. In no branch of trade are the indications of future expansion brighter, and no more systematic or more valuable effort being made to advance the commercial supremacy of Baltimore.

The magnitude of Baltimore's manufacturing interests is not fully appreciated even by the people who live in it. There are only about one or two cities in the United States that outrank Baltimore as a manufacturing city. The total amount of capital invested in the 3,683 manufacturing establishments of various kinds that existed in 1880, was \$38,586,000, with a product of \$78,417,000. The establishments of 1890 numbered 5,600, with a capital of \$60,000,000, yielding a product valued at \$125,000,000. To this estimate there should be added, for greater accuracy, the manufacturing industries of Canton, aggregating probably \$10,000,000, and of Steelton and Curtis Bay, adding, combined, \$15,000,000. So that the total product might be placed at \$150,000,000.

BRICK MANUFACTURE.

Brick making in Baltimore is an industry of great import-There are nearly forty establishments of considerable size, most of them turning out handsome bricks, although steam and machinery has of late years been employed in the industry. The number of men employed in brick making ranges from 3,000 to 4,000, according as the yards are busy or not, and these employees represent a population of from 12,000 to 18,000. The capital invested is about a million and a quarter dollars. The yearly production varies according to the demand, from 130,000,000 to 150,000,000. The city ranks fourth in the Union as a brick-making centre, being surpassed only by New York, Philadelphia and Chicago in the number made. In quality, however, Baltimore surpasses all her rivals. The three cities that make a larger quantity of bricks gain their pre-eminence simply because they are two or three times as large as Baltimore, and the greater local demand leads to a greater production of the common and medium grades. The finer quality of Baltimore brick as a rule command \$10 a thousand more in the market than similar grades made elsewhere.

The brickyards are situated in the southern, southwestern and eastern sections of the city, along the outskirts, where the population is comparatively scant.

The local facilities for brick-making are almost unequaled. To carry on the industry with any degree of profit and success,

two elements are absolutely essential, viz.: An abundance of suitable clay conveniently obtainable and plenty of water, both as a means of transportation and as an indispensable ingredient in the composition of the bricks. Both of these, Baltimore possesses in almost superfluous quantity and of excellent quality.

That part of the southwestern section of the city known to the brick men as Carroll's field can boast of having afforded a site for the first of Baltimore's brickyards, to which have since been added many more in the neighborhood of the Spring Gardens, Columbia avenue and the Washington road. Yards of various dimensions and capacities are located in these sections. In the eastern, at the extremity of Monument, Gay and Biddle streets, there are a dozen or more flourishing brickyards.

They cover from five or six to fifteen or twenty acres each, including the space occupied by sheds and kiln and the clay banks, which are in every instance within convenient hauling distance of the sheds.

Beside these, Light and Charles streets are boarded by yards at their southern extremities, and across the Spring Gardens in Baltimore county are several others. The productive capacity of these establishments varies from 1,000,000 to 15,000,000 bricks each, per year.

With the exception of the vitrified brick, the local yards manufacture pretty much every imaginable kind of brick, of all sizes, shapes, colors and at all prices. The output includes the common run of kiln, sand, fire, paving, fancy, terra cotta and red, white, chocolate and buff press bricks, the latter being the most costly.

The trade is, of course largely local and domestic, as is natural in the case of an industry of this character. The outside trade is principally with New York, Philadelphia and Hartford in the north, St. Louis, Louisville and Chicago in the west, and Richmond, Savannah and Jacksonville in the south. This outside traffic is limited to pressed and fancy bricks of a superior quality, the sections mentioned supplying their own common brick as a rule.

The workmen in the brick-yards are for the most part paid by the piece. Skilled workmen receive from \$2 to \$3 per day, according to their proficiency, while ordinary labor earns from \$1.10 to \$1.25 per day. The proprietors, too, secure good returns from their investments.

PENNSYLVANIA STEEL WORKS.

The supreme advantages of Baltimore have been emphasized by the location here of the largest combined iron and steel works in the world, which have been established by the Pennsylvania Steel Works of Harrisburg, Pa. Without even the knowledge of Baltimore people, this city was selected after careful investigation of every large city on the Atlantic coast, and notwithstanding the most vigorous efforts of Philadelphia to secure this enterprise. Not a dollar of bonus was asked or paid. The site, including 1,200 acres of water front was bought and paid for by the company. Five million dollars has already been spent upon this plant, and probably five million more will be invested. It will make nearly as much iron, when fully completed, as the whole State of Alabama now produces, and nearly one-fifth as much as the whole State of Pennsylvania.

Four furnaces to make 1,000 tons a day have been built and four more will eventually be added. These eight furnaces will have a yearly capacity of over 600,000 tons of Bessemer iron. A rail mill to make 1,000 tons of steel rails a day has been completed. An iron and steel ship-building yard has just gone into operation. This gigantic combination now employs about 2,000 skilled mechanics and will increase the number to 5,000 as fast as possible. This is but one of the great industrial enterprises lately started near Baltimore.

COPPER WORKS.

The largest copper rolling works in America are in Baltimore, and an additional new \$500,000 plant is under construction.

The annual products of these works exceed 30,000 pounds of copper, and produce an immense amount of sulphate of copper, sulphuric acid, &c. They employ about 500 men, and

exported in 1890, 31,000 tons of copper matter, valued at \$6,000,000.

MISCELLANEOUS INDUSTRIES.

Baltimore is in the front rank of cities for the manufacture of boots and shoes. Her stocks include every variety, and her factory goods are equal if not superior to any made in the United States. The trade in this line is rapidly increasing, having advanced over 30 per cent. in the last five years. The sales during 1891, amounted to about \$12,000,000. The leather tanned in Maryland is among the best in the country. The sales in this line amounted to about \$9,000,000, in 1891.

The brass foundries and finishing works are a large factor in the industries of Baltimore and give employment to about 2,000 hands. The manufacture of furniture is also on the increase. In 1891 Baltimore manufactured about \$3,000,000, giving employment to nearly 2,500 skilled workmen.

There are about 150 dealers in hardware, who do a business of about \$25,000,000. Baltimore is easily the leading city in the United States in the manufacture of straw goods, and the trade is constantly increasing, due to the superior character of the manufacture. There are nine manufacturing firms with a capital of about \$750,000, employing 1,200 hands, with annual sales of about \$2,000,000. One-half of the entire production of curled hair and bristles produced in the United States are manufactured in Baltimore. The sales in this industry amount to about \$2,000,000 annually. Baltimore has always been a prominent centre of music, and the manufacture of pianos and musical instruments have always kept pace with this progress. The sales in this industry alone amounts to about \$3,000,000 annually. One establishment represents a capital of \$1,000,000 and employs about 800 persons.

TOBACCO TRADE.

The tobacco trade is one of the oldest and most valuable belonging to Baltimore. The crop of 1890 was 30,000 hogsheads, of good quality. Maryland tobacco is almost entirely consumed abroad, Holland being the largest single consumer;

France next, and Germany third. Besides the Maryland crop, the entire crop of Eastern Ohio finds its market in Baltimore, and a large part of the crops of North Carolina and Virginia. The value of the Maryland and Ohio crop sold in Baltimore ranges from \$1,500,000 to \$2,500,000 annually. The amount of the leaf exported and consumed at home reduced the stock on December 31, 1889, to 21,661 hogsheads. December 31, 1890, the stock in the warehouses had decreased to 9,585 hogsheads, which was the smallest stock held in Baltimore at that season in many years. In the manufacture of smoking tobacco, fine-cut chewing tobacco, cigars, cigarettes and snuff, several millions of dollars have been invested.

The yearly product of all the smoking tobacco and snuff factories is about 11,000,000 pounds, while the output of the largest cigar manufactories is about \$19,000,000 a year, and the smallest establishments combined, turn out nearly three-quarters of a million. Most of these goods are of medium grade, but some few factories give a great deal of attention to the fine grades, made entirely of imported tobacco. The tobacco factories employ more than 1,300 hands, while the largest of the cigar factories employ from seventy-five to one hundred hands each. The products of all these factories are shipped all over the United States, and some to foreign countries. Their business is increasing every year. The manufacture of tobacco has shown a substantial growth, and the output has increased within the past few years from 3,000,000 pounds to over 15,000,000 pounds annually.

MISCELLANEOUS TRADE OF 1891.

The value of the output for 1891, of various other branches of trade are found to be: Bar iron and steel \$1,000,000; Lithography, \$500,000; Patent medicines and drugs, \$10,000,000; confectionery and fruit \$5,000'000; paints, oil and glass; \$5,000,000; woodenware, brooms, willoware, \$2,000,000; chinaware, crockery &c., \$1,000,000; stone and marble, \$1,000,000; paper bags, \$500,000. The receipts of live stock in Baltimore for the year 1891, were as follows: Cattle,179,163, sheep 395,762, hogs 506,435. Over 65,000 cattle were exported to foreign ports.

FOREIGN IMPORTS AND EXPORTS.

The principal foreign imports and exports during the year 1891 were as follows:

Imports—465,979 tons iron ore, 1,025,464 boxes tin plate, 46,327 sacks, 7,382 tons and 89,138 bushels salt, 63,507 packages chemicals, 170,270 bags coffee, 647,143 bunches bananas, 1,799,000 cocoanuts, 369,184 dozen pineapples, 45,257 bags nitrate soda, 30,989 tons agricultural salts, 14,555 tons brimstone, 57,641 bags rice, 27,150 bags bone meal, 135,567 casks cement, 15,858 barrels whiskey, 495 hogsheads and 81 tierces molasses, 943 hogsheads, 100 tierces and 198,644 bags sugar, 582 tons guano.

Exports—4,085,400 bushels corn, 16,331,311 bushels wheat 768,854 bushels rye, 2,555,860 barrels flour, 468,410 cases canned goods, 45,603 hogsheads tobacco, 166,915 bushels clover seed, 203,822 bales cotton, 118,628 tons coal, 103,839 barrels rosin, 64,899 cattle, 8,922,995 gallons refined petroleum, 1,608,000 staves, 61,716,324 pounds lard, 32,204,000 feet lumber, 46,653 logs wood.

BALTIMORE LEADS THE COUNTRY.

The total exports of breadstuffs from the United States in January 1892, amounted to \$30,147,281 against \$9,718,586 for the corresponding month of 1891. For the seven months beginning with July '91, and ending with January 31, 1892, the value of the breadstuffs exported was \$186,136,744, as compared with \$64,524,799 for the same months of the preceding fiscal year, showing the immense gain of over \$121,000,000. Comparing the exports from Atlantic ports as compiled by the Beareau of Statistics we have some figures that show how Baltimores foreign trade is growing.

The exports of corn in January were as follows:

±	•/	
From		Bushels.
New York		3,493,407
Boston		371,022
Philadelphia	• • • • • • • • • • • • • • • • • • • •	4,282,053
Baltimore		4,519,480

As these figures show Baltimore's corn exports for January exceeded New York by over 1,000,000 bushels, and the difference would have been very much greater, but for the fact that our railroads could not handle all of the grain offered and large quantities were diverted to Philadelphia.

Comparing the total value of exports of breadstuffs from Boston, Philadelphia and New Orleans and Baltimore for the

seven months ended January 31, 1892, we have:

Boston\$9,300,404
Philadelphia14,783,009
New Orleans
Total exports
" Baltimore31,387,835

Thus notwithstanding the diversion of grain from Baltimore to Philadelphia, and of the great increase at New Orleans due largely to the inability of railroads to handle the grain, thus forcing it down the Mississippi, Baltimore in the last seven months has exported almost as much breadstuffs as Boston, Philadelphia and New Orleans combined.

The number of sail vessels which entered Baltimore during the year from foreign ports was 214, measuring 81,050 tons; 620 steam vessels entered Baltimore from foreign ports, measuring 993,850 tons.

The number of sail vessels which cleared from Baltimore during the year for foreign ports, was 289, measuring 62,628 tons; and the number of steam vessels cleared from Baltimore for foreign ports, was 619, measuring 1,002,497.

As the laws do not require vessels in the coasting or domestic trade to enter or clear at the Custom-house, quite a number do not do so, and it is therefore impossible to obtain full statistics about coastwise commerce, but the number of vessels which entered Baltimore, was 1,215, measuring 1,181,348 tons, and the number that cleared, was 2,012, measuring 1,548,901 tons. There were eighteen new vessels built and documented in this district with a tonnage of 3,200 tons. There are 1,191 vessels owned and documented in the district of Baltimore, representing a carrying capacity of 153,108 tons.

SHIP BUILDING INDUSTRY.

The rapid forward strides made by all branches of business in Baltimore during the year 1891, was very marked in the ship building industry. In the twelve months ending January 1st, 1892, twenty-two vessels have been either launched or are practically ready for their initial dip in the water of the harbor. These represent an aggregate gross tonnage of about 8,424, and a total valuation of about \$1,639,000. Besides this, there has been a large repair business, and all the shipyards have been kept busy.

As compared with the year 1890, the past makes a most creditable showing. There has been a larger number of new vessels built, and a larger aggregate valuation, though the tonnage is relatively smaller. The total expenditure in repairs also exceeds that of 1890.

In the past year, the list of Baltimore shipyards has been augmented by the opening of the marine department of the Maryland Steel Company's Works at Sparrows' Point. These works have turned out two large steel tugs, each valued at \$40,000. Two large passenger steamers are also being constructed there.

At the Columbian Iron Works, the United States Cruisers Montgomery and Detroit have been launched. Each is of 2,000 tons burden, and the bid for the two was \$1,250,000.

As a shipbuilding station Baltimore takes an early precedence among American cities. Ships were built at Fell's Point before the founding of Baltimore Town in 1730. During the various difficulties in which this county was engaged with foreign nations the ship-yards of Baltimore were very active in fitting out cruisers to annoy the enemy. At the breaking out of the Revolutionary War the Congressional Marine Committee equipped in Baltimore a sloop and schooner, the first cruisers of the new government. In December, 1775, Congress ordered the Virginia frigate to be built here, and she was launched in the following year from a ship-yard at Fell's Point. In the war for independence, notwithstanding the powerful navy of Great Britian blockaded the Chesapeake, over two hundred and forty-eight privateers, with letters of

marque and reprisal, sailed from the port of Baltimore. They carried an aggregate armament of eighteen hundred and ten guns and six hundred and forty swivels. These privateers were the foundation of the United States Navy, and many of the most distinguished mayal officers mentioned in American history began their career as officers of these Baltimore cruisers.

At the time of the threatened war between France and England in 1798, which it was feared would involve the United States, the patriotic citizens of Baltimore took an active and zealous part in building and equipping war vessels for our government. The citizens at a cost of nearly half a million of dollars, built at Fell's Point and presented to the United States the sloops of war "Maryland" and "Chesapeake." The former carried twenty-six guns and the latter twenty guns. The frigate "Constellation," of thirty-eight guns, which afterwards captured the French frigate "Insurgente," was built in this city, at the ship-yard of David Stoddert. The "Baltimore" and "Montezuma," of twenty guns each, and the "Louisiana" were also built here by our skillful shipbuilders.

In the war of 1812–14, Baltimore again took lead in fitting out war vessels, and was more active and patriotic in annoying the enemy than any other city in the Union. Of the two hundred and fifty privateers that sailed from all the states combined, this city contributed fifty-eight. In 1826 a sixty-four gun frigate was launched in Baltimore for the Brazilian

government.

The immense demands which the late civil war occasioned gave full employment to the naval constructors and the Abbott Iron Works in this city. The largest orders were filled here with a promptness and fidelity which elicited the special thanks of the department and the praise of the officers to whom the work was delivered. On one occasion in 1863, the late Horace Abbott completed an order for 250,000 pounds of rolled iron in forty-eight hours, and received from Secretary Wells a letter in commendation of his fidelity and energy. The Abbott Iron Works furnished the rolled iron plates for the Monitor which fought the Merrimac in Hampton Roads, and subse-

quently furnished the armor plates for nearly all the vessels of the monitor class built on the Atlantic coast. He also made the plates for the large ironclads Roanoke, Agamenticus, Monadnock and other formidable vessels that took such a prominent part in the conflicts of the late war. Besides these contributions to the navy of the country, the gunboats "Entaw," "Pinola" and the monitor "Waxhaw" were also constructed here.

The best evidence of the superior workmanship and skill of our shipbuilders, can be found in our clipper ships, which have never been surpassed elsewhere in America, and not even approached in Europe. These "skimmers of the seas," commanded by expert and daring masters, in the early days of our city became the sovereigns of the West Indian trade, and even of some of the European traffics, and laid the foundation of our present commercial greatness. They furnished other ports with models for their best ships, and the changes introduced by the fast European steamers may be directly traced to the model of the clipper ships of Baltimore.

In view of these facts there is reason to beleive that there is no city in the country which possesses greater advantages for building fine ships or cruisers than this, and with a little enterprise on the part of our people, we can secure a share of the government work. Baltimore has the same skill and material, the energy and capital, the same cheapness of labor, and all her other facilities which made her clipper-built ships, frigates and monitors known throughout the world. The new demand for iron cruisers will find this port equally prepared with all the appliances for the construction of that class of vessels. The government will not only find here a deep, straight and secure channel, a depot for that species of coal which is best for her steam vessels of war and transports, but one of the finest dry docks in the country, an abundance of cheap iron, timber, and everything else that enters into the construction of a first-class vessel of war.

BANKS AND BANKING.

While we have the same number of national and State banks as in 1880, the capital of \$13,333,260 indicates an increase of

\$643,000 with one national bank in course of formation, with upwards of \$1,000,000 capital. Trust companies have grown apace. There was in 1880 but one, with a capital of \$500,000. During the the intervening period they have been increased to four, with a total capital of \$2,500,000. Bank clearances have increased from \$581,000,000 in 1885, to 753,000,000 in 1890, the latter figures being an increase of one hundred millions of dollars over those of 1889.

Baltimore has not had a bank failure in 57 years. This speaks exceedingly well for the financiers of the city, and is a record not equalled by any city in the Union.

The census for 1890 shows that out of an entire population of 434,439 souls in Baltimore, there are 116,658 men over twenty-one years of age, entitled to the priviledge of casting a vote; 91,490 men between 18 and 44 years of age, subject to military duty, and 112,247 children of both sects, between 5 and 17 years of age, the period generally classed as the school age. The full statistics furnished are of great interest, and are as follows:

Population, 434,438; males, 206,114; females, 228,325; native born, 365,436; foreign born, 69,003; white (aggregate), 367,143; native white, 298,567; native parents, 186,625; foreign parents, 111,942; foreign whites, 68,576; colored, 67,296; native, 66,863; foreign, 427.

Ages.	Males.	FEMALES.	TOTAL.
Under 1	4,847	4,720	9,567
1 to 4	18,355	18,159	36,514
5 to 17	54,759	57,488	112,247
18 to 44	91,490	105,215	196,705
45 and over	36,663	42,743	79,406
21 and over	116,658	131,684	248,342

HOUSE BUILDING FOR 1891.

But few of the 500,000 residents of the city of Baltimore realize the great increase in building which the record for the year 1891, presents. The year 1891, has been a marvelous one in the history of Baltimore advancement in the way of new buildings. Both the business and residence portions of the city have been improved by massive business blocks and handsome residences. This change is not confined to any particular district, but is general throughout the city. Old structures have been torn down to give way to great piles of brick and stone. Lots that in 1891 were vacant, now are sites for new business houses; in the residence portion of the city a number of magnificent houses have been erected, and many of the subdivisions that were decorated only with lot stakes in 1881, are completely changed by the building of hundreds of houses. It would be difficult to form an accurate estimate of the aggregate sum that has been invested in new buildings in Baltimore in 1891, but contractors, builders and real estate operators place the figures at about \$4,000,000.

There were 2,137 new buildings erected during 1891, and 560 new additions, making a total of 2,697 for the year.

The building operations for the ten years were more active than in any other decade of the present century, and the aggregate amount of money expended during this time is far in excess of any previous census period. Records of the building departments show that from January, 1880 to January, 1891, there were 18,896 permits granted for new buildings and 4,940 alterations authorized, making a total expenditure of \$35,571,653. These figures show an annual average expenditure of over \$3,500,000, or at the rate of \$17,785 for each of the two hundred working days in each year during which such labor can be profitably carried on. The greatly increased cost is not so much from the increased number of the buildings as from their character and style of architecture. improvements for 1891, show an increase of 600 over the preceding year, and 215 over 1889, while the total increase, both in addition to houses already built and new buildings is 639 over 1890, and 241 over 1889. The new buildings of the

most importance which were completed or are in the course of construction, and which are added to the list of improvements for 1891, are: The ten-story Equitable building, being erected by the Calvert Building and Construction Company; the Fidelity and Deposit Company, eight-story building; Joseph M. Cone's law building, seven-story; Jarvis and Conklin, new seven-story building adjacent to the Blackstone building; the Record building six stories; "The Arundel," the new apartment house, and "The Stafford," the former six stories and the latter nine stories high.

The number of buildings in Baltimore are as follows: Churches, 364; warehouses, 5,257; stables, 5,282; dwellings, 84,247; public schools, 147; total, 95,297.

INTERESTING STATISTICS.

Among the many other interesting facts about Baltimore, it may be stated that the area of the city is about 33 59-100 squate miles, or 21,498 acres; area of parks, \$39.77 acres: electric lights about 1,000; miles of horse railroad, double and single track, about 175; miles of electric railroad about 20: miles of cable road about 18; gross revenue of the city. \$10,497,578.35; gross annual expenses, \$10,418,976.22; annual department expenses, \$4,125,007.18; number of liquor licenses issued 2,073; revenue from liquor licenses, \$507,047.94; miles of paved streets, 780; miles of sewers constructed, 27.75: miles of water pipes, 407; storage capacity of reservoirs, 2,274,000,000 gallons; average daily consumption of water, 45,000,000 gallons; miles of gas pipe, 450; public gas lamps, 6.000; daily capacity of gas works, 8,000,000 cubic feet: annual consumption of gas, 1,150,000,000 cubic feet; number of police, 800; appropriation for police force, \$800,000; steam fire engine companies, 14; chemical engine companies, 8; hook and ladder companies, 6; hose carts, 28; horses, 113; number of men in fire department, 264; appropriation for fire department, \$245,000; fire plugs, 1230; miles of fire alarm wire, 500; total fire alarms, annually, 393; school houses, 147; number of teachers, 1244; number of pupils-white, 58,870. colored, 9,298, total, 68,168; annual cost of school depart-

ment, \$1,020,000; number of national banks, 19; capital, \$12,313,260; surplus, \$4,975,346.76; loans and discounts, \$31,727,650.32; deposits, \$29,748,822.45; number of State banks, 4; capital, \$1,100,000; surplus, \$583,000; bank clearances for 1891, \$735,764,652; postal receipts for 1891, \$729,-154.01; number of pieces of mail handled, 93,000,000; internal revenue collected in Maryland, \$3,062,360.54; cost of water works, \$10,258,039.89; total revenue from water rates, \$602,-824.78; number of houses and warehouses receiving water in the city, 52,876; number of dwellings receiving water in the county, 1,048; number of Savings banks, 12; aggregate deposits in savings banks, \$41,000,000; population to each square mile, 13,774.22; population to each acre, 21.02; miles of streets lined with shade trees, 100; average width of streets, 66 feet; average number of persons to each mile of street, 557; days supply of water on storage, 54; average charge for water per dwelling, \$7.00; registered vote-white, 80,159, colored, 12,837-total 92,996; wards, 22; representation in State Senate, 3; representation in House of Delegates, 18; number of judges Baltimore courts, 6; city tax, 1891, \$1.55; State, \$.17\frac{3}{4} total \$1.72\frac{3}{4}; representatives in Congress from Baltimore, 2; representatives in First Branch City Council, 22; representatives in Second Branch City Council, 11; Board of Police Commissioners, 3; Supervisors of Elections, 3; Liquor License Commissioners, 3; Inspectors of Steam Boilers, 2: City Finance Commissioners, 3; Park Commissioners, 7; Appeal Tax Court, 3; Water Board, 7; Coroners, 4; Vaccine Physicians, 22; Harbor Board, 6; Harbor Masters, 6; Superintendents of Streets and Roads, 9; Commissioners for Opening Streets, 3; Station Houses, 7; School Commissioners, 22; Trustees of Bay View Asylum, 7; Directors City Jail, 7; City Markets, 11; Fire Alarm Stations, ; Notaries Public. 15; Business Exchanges, 15; City Passenger Railway Companies, 8; Lines of Railway, 27; Dispensaries, 20; Hospitals and Infirmaries, 22; Cemeteries, 29.

There is now being built a Belt line, which includes a double track tunnel under the city the entire distance from north to south. It involves an expenditure of about \$7,000,000, and will require about twelve months for its completion.

Development work now in progress, including the steel works, the Belt line and tunnel, twenty miles of cable railway, ten or fifteen of electric line, to be followed by twenty or twenty-five miles more, office buildings, warehouses, factories, etc., foots up about \$30,000,000 or \$35,000,000.

Among the great charitable and educational institutions of the city endowed by rich men within recent years, are the Johns Hopkins University and Hospital, with an endowment of between \$7,000,000 and \$8,000,000; the Pratt Library, \$1,000,000; the Peabody Library, \$1,000,000; the McDonogh School, \$1,000,000; the Thomas Wilson Sanitarium, \$2,500,000; the Shepherd Asylum, \$1,000,000. These, of course, do not include large schools and other institutions such as the Woman's College, recently erected by the Methodists at a cost of two or three hundred thousand dollars, and the school erected by Miss Mary Garrett at a cost probably of from \$150,000 to \$200,000, and many other similar institutions.

ADVANTAGES OF BALTIMORE.

The foregoing results which could be much further enumerated can leave no doubt as to the future importance of this city as an industrial emporium. Thus it appears that the natural and legislative advantages afforded by this city are being recognized by those who seek a field for the investment of capital in manufactures. Citizens have liberally invested in new enterprises, and have been foremost in promoting industries already established. More recently, attention has been attracted from abroad, and a number of capitalists have been drawn hither, who with ample means and great energy, have undertaken works which are destined to change the aspect of the localities chosen for the site of their operations, and by creating communities of themselves add vastly to the material welfare of the city as a manufacturing centre. Some of these later accessions, though they have chosen locations without the city limits, will tend largely to increase the wealth of the city.

Among the advantages claimed by Baltimore for the exchange of the raw material for the manufactured article, is the fact that it is a point where the Susquehanna white pine and hemlock, Virginia, Carolina, Georgia, and Florida yellow pine and cypress, the West Virginia hickory, ash, walnut and poplar, and the West Indian and Central American hard woods and veneering materials meet. In its near inexhaustible quarries of fine marble, and districts where the material is unfailing for the production of brick, which is availed of, and has given to the world the Baltimore brick, which has no equal.

Again, there is profit in proximity to the exhaustless coal fields of Maryland, Pennsylvania and West Virginia, and the facilities of transportation over the Baltimore and Ohio, Northern Central and Western Maryland Railroads, and the Chesapeake and Ohio canal, which bring the article to the water's edge. Wood in abundance is supplied by vessels from the country bordering on the Chesapeake and its tributaries and the two Carolinas.

These conditions substantiate the fact that this is the most accessible and economical seaport for fuel in the United States.

The boundaries of the city include some tracts of unoccupied space, to be had by rental or purchase upon favorable terms, which are desirably located, whether by stream or river, on the margin of the basin or by the shore leading to the bay. Besides these, just beyond the corporate limits, the suburbs present great opportunities in streams capable of supplying ample power, only waiting to be utilized. In some cases, ground free for a term of years, is offered to those who would establish thereon manufactories.

The city government has wisely exempted from taxation all manufacturing plant within its jurisdiction, and as the necessary expenditures in this direction often absorb two-thirds of capital invested, this provision, so nearly amounting upon capital to total exemption, presents an inducement too enticing to be overlooked. With equal liberality, water for these purposes is levied for by the authorities at an almost nominal rate. Neither of these may be looked upon as spasmodic acts of

legislation, nor can there be in the most remote probability of the latter being rescinded, inasmuch as the daily supply of 170,-000,000 gallons of water leaves about 100,000,000 gallons available for manufacturing purposes.

The neighboring soil is rich in ores and materials in constant requisition in certain branches of manufacture, and facilities for the importation of steel, copper, iron, tin, chemicals and raw materials are not equaled by any port on the Atlantic coast. Iron, limestone, slate, chrome, iron-ore, steatite, mica, emery, kaoline, fire-brick clays, pottery clays, sand of superior quality for glass manufacture—all are found in the neighborhood, some of them of unrivalled excellence.

Surrounding conditions favorably affect labor, which is plentiful and at reasonable wages. It is a fact, and worthy of more than passing mention, that within the city limits there is a roof for every laborer, with opportunity for establishing, each one for himself, that which is worthy of being called a home. Differing in this respect from many other cities, there is here no tenement system—the necessity not existing.

With its close proximity to the cotton, tobacco, grain and pork-producing sections of the country, and by means of its unequaled railway service to those points and to the Northern lakes, Baltimore, the most northern of Southern, and the most southern of Northern cities, is situated, viewing its inland and central position, as the most natural market for the working up of raw material, and the distribution of the same when manufactured and ready for consumption. Located at the head of the Mediterranean of America, as the Chesapeake Bay has not unaptly been termed, with a harbor approached by a broad and deep channel, subject to no unusual ebb and flow of tide, at which are hourly arriving, steamers that reach all the Atlantic ports, supplemented by numberless steamboats and sailing craft of every dimension and build that drain the shores of tributary rivers and inlets and the foreshore of fertile lands to the extent of two thousand or more miles, these conditions, in addition to the lines of rail from and to every point of the compass, are such as to justify the realization pledged to the newcomer of a hearty welcome and a fair field for operation, and for the manufacturing growth of the city the greatest possibilities.

SECURE INVESTMENTS.

STABILITY OF REAL ESTATE TRANSACTIONS—VALUE AND CHEAPNESS OF LAND.

The general impression among leading real estate brokers of this city is that the advantages of Baltimore for safe and profitable investments in real estate have never been taken advantage of. When the comparatively low price of Baltimore real estate is taken into consideration, many express surprise that outside capital has not been informed of the fact. The impression is that if the true facts were known there would be an influx of visitors. There are lots of vacant ground in East, West, South and North Baltimore, and good business property can be had in the central portions of the city, though the prices asked for it are considered good. Yet these prices are low when compared with other cities.

Considering the immense advantages of Baltimore for business and dwelling property—the health, fine markets, libraries, hospitals, schools, proximity to Washington, &c .- real estate is lower in Baltimore than in any other city in the United This does not exempt even the growing Western cities, but there is an element of stability about property in Baltimore that makes it especially desirable as an investment. The Real Estate Exchange took up the matter sometime ago, and sent to the city council a memorial claiming that it would be greatly to the interest of the city and add to its prosperity if an official publication were made, setting forth the advantages of Baltimore, with the view of inducing business men and others to locate and encourage capitalists to invest here. This method the real estate men say, has been tried in other cities to great advantage. The memorial said: "We have at present no ready means of placing before non-residents the great advantages we possess in a fine harbor, extensive water fronts, railroad and shipping facilities for handling grain, oysters, tobacco and other freights, abundant pure water supply, moderate taxes, cheap real estate, low rents, fine parks, superior markets, universities, colleges, schools, libraries, handsome churches, &c., which information should be placed before the country at large, in printed form, by the publishing of a large edition for free circulation by our merchants and business men." This information, which the Exchange wants, has been furnished to the world, through the medium of the reports of the Land Office. The idea is not intended to be conveyed that real estate in Baltimore is a drug in the market, and has to be boomed to be sold. Such is not the case. It is simply fully as valuable and much more cheaper than elsewhere, and will pay handsome returns to investors.

FIRST THINGS IN BALTIMORE.

A RECORD OF INVENTIONS AND IMPROVEMENTS ORIGINATING
IN BALTIMORE.

The following notable inventions and mechanical and other improvements had this city for their birthplace, and many initial acts and events of importance also occurred here.

1757—April 8.—The Legislature met for the first and only time in Baltimore, and adjourned May 9, after passing seventeen important laws.

1769—Dr. Henry Stevenson established the first small-pox hospital in the United States.

1771—John Stevenson of Baltimore, began the shipment of wheat to Europe, which was the foundation of our present grain trade.

1772—Umbrellas were first introduced in Baltimore as a protection from the sun and rain. They were of oiled linen with rattan sticks.

1774—Wm. Goddard, of Baltimore, first established the present post office system.

1774—Rev. William Otterbein first organized in Baltimore the denomination of the United Brethren in Christ.

1774—May 27.—The committee of correspondence of Baltimore first suggested a general congress of delegates from all the colonies. This congress assembled, and from its deliberations resulted the declaration that the colonies were free and independent States.

1774—December 3.—Mordecai Gist, a Baltimore merchant, organized the first military company in the province for the revolution.

1775—The first act of the Continental Congress for the formation of a navy, was promulgated on the 13th of October, and in the same month the continental marine committee at Baltimore fitted out two cruisers, the "Hornet" and "Wasp," to make the first essay of the American navy.

1775—Com. Barney hoisted the first continental flag seen in Maryland, upon a staff at the door of his rendezvous.

1775—The "Virginia," the first frigate for the continental navy, was built at Fell's Point by Mr. Wells, shipbuilder.

1776—The first Declaration of Independence was printed in Baltimore by Mary Katharine Goddard, on the site of the Sun office building.

1776—June 5.—Capt. James Nicholson, of Baltimore, was appointed by Congress the first officer in rank in the United States Navy.

1776—Dec. 20.—The Continental Congress assembled in Baltimore, and on the 27th first invested Gen. Washington with dictatorial powers.

1777—The Baltimore merchants were the first to fit out privateers with letters of marque and reprisal against the British, and during the revolution, 248 sailed from this port, being more than any other port in the colonies.

1778—Count Pulaski established his headquarters and organized in Baltimore the first independent corps in the Revolutionary Army.

1781—The first building of brick in the United States erected for theatrical purposes was built in Baltimore.

1783—John and Andrew Ellicott invented the first mud machine.

1784—Peter Carnes made the first balloon ascension in the United States from Howard's Park.

1784—The first application of a water-wheel on each side of a boat for the purposes of navigation, was exhibited in Baltimore by a man who propelled a large canoe from the Susquehanna into the basin by turning a crank.

1784—John Frederick Amelung, who established the first glass manufactory in the United States, on the Monocacy, arrived in Baltimore with a number of his workmen from

Germany.

1784—December 27.—The first Methodist Episcopal Church in the United States was orgnized in Baltimore, and here Rev-Thos. Asbury was made the first bishop of the Church in America.

1785-—John O'Donnell, in the ship "Pallas," was the first to import China goods to the United States.

1785—March 3.—The first agricultural society was formed with Harry Dorsey Gough, president, and Zebulon Hollingsworth, secretary.

1787—The first Sunday-Schools were established by the members of the Methodist Church.

1787—Oliver Evans' steam-carriage, elevator and hopper-boy, were first introduced in Baltimore. His land carriage was the first ever propelled by steam in the world.

1788—The ship "Chesapeake," of Baltimore, was the first American vessel allowed to hoist the colors of the United States in the river Ganges and to trade there.

1789—March.—"Seven hundred of the mechanics and tradesmen of Baltimore" were the first to petition Congress to give protection to American manufactures by imposing on "all foreign articles which could be made in America such duties as would give preference to their labor." This was the origin of the American system of protection to home industry.

1789—The first general council of the Catholic clergy was held.

1789—Mr. Cruse erected the first steam saw mill near Pratt street wharf.

1790—Wall paper was first introduced.

1790—August 15.—Rev. John Carroll, of Baltimore, who was appointed the first viear-general of the Catholic Church in America, in 1786, was consecrated the first Catholic Bishop of the United States. In 1808, he was made the first archbishop.

1791—July 10.—The first Catholic seminary in the United

States for theological students was opened.

1792—The Baltimore Water Company, the first of the kind in the United States, was formed.

1792—April 1.—The doctrines of the New Jerusalem Church were preached for the first time by Rev. Mr. Wilmer.

1793—Cigars were first used in Baltimore to keep off the yellow fever.

1796—The Charitable Marine Society, the first of its kind, was formed and incorporated.

1796—The Baltimore and Washington Turnpike was the first in the United States.

1797—Capt. David Porter, Sr., established the first telegraph (semaphore) station on Federal Hill.

1798—The merchants of this city were the first to construct and equip two sloops of war, which they presented to the gov-ernment. They were named the "Maryland" and the "Chesapeake."

1799—The first Sweedenborgian Church was founded in Baltimore by Rev. John Hargrove.

1802—Benjamin Henfrey, of Baltimore, first discovered a method of creating a light by gas from wood, and actually lighted Richmond, Va., before any similar discovery was known.

1806—July 7.—The corner-stone of the first cathedral in the United States was laid in Baltimore.

1808—Major George Peter organized the first horse artillery at Fort MeHenry.

1809—June 2.—Mrs. Eliza Ann Seaton first established the American Sisters of Charity in Baltimore.

1810—Peregrine Williamson was granted a patent for metallic writing pens, the first of the kind manufactured in the United States.

- 1812—Wm. Wilson, of Baltimore, was the first man in this country to loan the government \$50,000, to carry on the war with Great Britain, without interest.
- 1812—The citizens of Baltimore were the first to pledge "their lives and fortunes" in support of the government in the war against Great Britain.
- 1812—Although Baltimore was frequently blockaded by the British fleets, she took the lead in fitting out privateers, and was more active and patriotic in annoying the enemy than any other city in the Union.
- 1812—Dr. William Gibson was the first surgeon that ever ligated the common iliac artery. He was the first surgeon in this country to perform the supra-pubic operation of lithomy. He performed the Cæsarian operation twice upon the same patient, saving each time the mother and child. He was the first to divide the straight muscle of the eye.
- 1813—"The first marine artillery of the Union" was organized at Fort MeHenry.
- 1813—April 27.—Captain Stephen H. Moore's company of Baltimore volunteers was the first to enter Toronto, Canada, and to place the flag presented to them by the ladies of Baltimore on the capitol of Upper Canada.
- 1814—The defeat of the British before Baltimore, by its citizen soldiers, was the first of a brilliant series of events in the war of 1812 that brought about peace. Christopher Hughes, Jr., of Baltimore, brought the first tidings of peace to the United States.
- 1814—July 4.—The corner-stone of the first monument erected to the memory of George Washington was laid.
- 1814—September 12.—The corner-stone of the first and only monument erected to the memory of the heroes of the war of 1812 was laid.
- 1814—September 13.—Francis S. Key, "amid the rocket's red glare; bombs bursting in air," composed "The Star-Spangled Banner," our national anthem. It is descriptive of the scenes he witnessed in the harbor of Baltimore and of his own excited feelings.

1814—Samuel Sands was the first printer to put "The Star-Spangled Banner" in type. It was first published in The Baltimore American.

1814—October 19.—Mr. Hardinge sung the "Star-Spangled Banner" for the first time in public at the Holliday Street Theatre.

1815—The first shipment of petroleum in bulk was made from Venango county, Pa., to Baltimore, but on account of its bad smell, was emptied into the basin.

1816—June 11.—"Carburetted hydrogen gas" was first exhibited at Peale's Museum, (afterwards old City Hall,) Holliday street.

1816—June 17.—"The Gas Light Company of Baltimore" was the first company organized in the United States to manufacture gas for street and general use.

1816—September 20.—George Elliott, of Baltimore, was the first to roll bar iron edgeways.

1817—John Neal, the anthor, while residing in Baltimore, published his first novel.

1819—February 23.—Francis Guy, of Baltimore, made the first paper carpet, which was really the first step in making oilcloth.

1819—April 2.—John S. Skinner first published the American Farmer, the pioneer agricultural paper in the United States.

1819—April 26.—The first lodge of Odd-Fellows in the United States was formed in this city by Thomas Wildey and others.

1819—July 18.—Ebenezer French issued the first Sunday paper published in the United States.

1820—Dr. Horatio Gates Jameson was the first surgeon in this country to attempt the operation of ovariotomy, and the first in the world to amputate the cervixuteri for scirrhus.

1820—The first theatre in the United States lighted by gas was the "Belvedere," or "Old Mud" Theatre, which formerly stood at the northwest corner of North and Saratoga streets.

1821—February 22nd—The first Grand Lodge of Odd-Fellows of the United States was organized.

1826—Mr. Beacham, of Baltimore, built the first 64-gun ship in the United States for the Brazilian Government.

1826—The Hebrews first became freemen of Maryland. In October Solomon Etting and Joshua I. Cohen were the first Hebrews elected by the people to office.

1827—February 28.—The first railroad act of incorporation granted by any State in the Union, was granted by Maryland

to the Baltimore and Ohio Railroad Company.

1827—April 24.—The Baltimore and Ohio Railroad Company was the first railroad company organized in the United States.

1828—The Methodist Protestant denomination was first founded.

1828—Ross Winans first invented "the outside bearing" to railroad carriages, which is now the only bearing used throughout the world.

1828—December 10.—The first American patent for a locomotive, was taken out by Wm. Howard, of Baltimore.

1829—The first silk ribbons made from American silk were made in Baltimore.

1829—The "Oblate Sisters of Providence," a colored order of women, was first founded in Baltimore.

1829—March 20.—The city council passed the first registry law for voters.

1829—June 5.—The Sisters of Providence, the first religious society of Catholic colored women, established the first school for colored girls in Baltimore.

1829—October 1.—The first Catholic provincial council held in the United States met in Baltimore.

1830—January.—The first car ever propelled by a sail was run on the Baltimore and Ohio Railroad.

1830—August 28.—Peter Cooper made the first journey in America by steam car, from Baltimore City to Ellicott's Mills and return. This distance—thirteen miles—was made in 57 minutes.

1831—April 26.—The first building erected in America by the Odd-Fellows, was dedicated in Baltimore.

1831—September 26.—The first anti-Masonic convention and the first national convention for the nomination of a President and Vice-President, assembled in Baltimore, and Wm. Wirt of this city, was nominated for President, and Amos Ellmaker, of Pennsylvania, for Vice-President.

1831—December 12.—The first national republican or whig convention assembled in Baltimore, and nominated Henry Clay for President and John Sergeant for Vice-President.

1832—Baltimore was the first city in the Union to import guano.

1832—May 21.—The first democratic national convention was held in Baltimore and nominated Gen. Jackson for re-election as President. Martin Van Buren was nominated for Vice-President.

1833—The improved Order of Red Men was first founded in Baltimore:

1833—John S. Clark, who was born in Baltimore, made his first appearance at the Howard Atheneum.

1838—May 20—The first regular steam vessel that crossed the Atlantic from the United States direct, was the steam packet "City of Kingston," Capt Crame, which steamed from Baltimore.

1838—Dec. 11.—The first National Silk Society was formed.

1839—The Baltimore College of Dental Surgery was incorporated, being the first in the world.

1840—The first temperance society was formed.

1844—The first electro-magnetic recording telegraph line in the United States was established by Prof. Morse, between Washington and Baltimore. The first experiment was made April 9, and the line completed May 24.

1844—The Sun was the first newspaper in the world to make use of the electric telegraph.

1846—May 11.—The first presidential message ever transmitted by telegraph was exclusively sent to the Sun.

1847—The Baltimore battalion planted the first American flag on the walls of Monterey, in the war with Mexico.

1848—November.—George B. Simpson exhibited in Baltf-more the successful submarine telegraph, the one now in practical use by all telegraph companies.

1850—The Catholic order of the Redemptorists was first established in the United States, at Baltimore.

1850—May.—The Independent Order of Red Men of the United States, was first organized in Baltimore.

1852—The Sun Iron Building was the first cast-iron building in Maryland, and the first iron newspaper building in the world.

1852—May.—The first Plenary Council of the Catholic Church in the United States was held in Baltimore.

1853—January 1.—At this time the Baltimore and Ohio Railroad was the longest in the world.

1853—The first Hoe type-revolving cylinder presses successfully used in the United States were introduced in the Sunbuilding.

1856—The first locomotive run by electricity, was used on the Washington branch of the Baltimore and Ohio Railroad.

1858—December 9.—Baltimore adopted the first paid fire department.

1859—The first "cigar ship" in the world was made by Thomas Winans, of Baltimore.

1860—May 8.—The first national constitutional Union party convention was held in Baltimore, and nominated John Bell, of Tennessee, for president, and Edward Everett, of Massachusetts, for vice-president.

1860—June 18.—The first split in a national democratic convention took place in Baltimore on the 22d of June, and on the following day the seceders nominated John C. Breckenridge their candidate for president, and Joseph Lane for vice-president. The regular convention nominated Stephen A. Douglas for president.

1861—April 19.—The first bloodshed in the late civil war took place in the attack on the Sixth Massachusetts Regiment by the citizens of Baltimore, when four soldiers and twelve citizens were killed.

1862—The Independent Methodist denomination was first formed.

• 1862—Horace Abbott, at the Canton Iron Works, rolled the iron armor plates for the turrett of the first "Monitor" built in the United States.

1865—The first Southern Agricultural Aid Society was formed.

1865—July 31.—The first monument erected to commemorate the memory of John McDonogh was dedicated.

1865—September 20.—The first monument erected to the memory of Thomas Wildey, the founder of the order of Odd-Fellows in the United States, was dedicated.

1866—The first Southern Relief Association was organized by the ladies of Baltimore. They distributed over \$164,569, besides the appropriation of \$100,000 contributed by the Legislature.

1867—November 27.—The order of the Knights of Pythias was instituted in Baltimore, when "Golden Lodge, No. 1," and "Monumental Lodge, No. 2," were organized.

1875—November 1.—The first monument erected to commemorate the memory of Edgar Allen Poe was dedicated.

1877—July 20.—The first blood shed in the great railroad strike took place in Baltimore, when 10 persons were killed and about 25 wounded by the Sixth Regiment militia firing on the crowd.

1881—June 23.—The discovery of the comet of 1881, was first published in The Sun, in advance of any paper in the world.

1886—June 30—Archbishop James Gibbons was made Cardinal by Leo XIII.

MISCELLANEOUS.

John Wilkes Booth, who assassinated President Lincoln, made his debut in Baltimore as Richmond, in "Richard the Third" in the Howard Athenaum. His remains are buried in Greenmount Cemetery.

Mr. Horace Abbott, at the Canton Iron Works, forged the first large steamship shaft ever wrought in this country. It was made for the Russian frigate Kamtschatka, and such was the interest manifested in it, that it was exhibited at the Exchange in New York.

The first steam engine in this country, with the wheels coupled by a double pair of drivers, was used on the Baltimore and Ohio Railroad by Phineas Davis, the inventor.

To Baltimore belongs the proud distinction of being the birthplace of the first German singing society in the United States. In the latter part of 1835, Rev. Henry Scheib came to Baltimore and took an active part in the formation of a singing society which, about a year later, on December 30, 1836, took unto itself a name and habitation as the "Baltimore Liederkranz."

Ross Winans planned the first eight-wheeled car ever built for passenger purposes. It was used on the Baltimore and Ohio Railroad and called the "Columbus."

James McHenry, a Baltimore merchant, secretary to Washington during the revolution, first Secretary of War, and after whom Fort McHenry is named, established the U.S. military academy at West Point.

Capt. Edward K. Cooper, of Baltimore, was the first discoverer of Navassa Island.

The first "wagon brakes" in this country were introduced by the Ellicotts.

Dr. John Beale Davidge was the first surgeon in the United States who tied the gluteal artery for the cure of aneurism. He was also the originator of the "American plan of amputation."

Prof. Nathan R. Smith first invented in Baltimore his lithotome and his anterior splint.

Horatio N. Gambrill invented the self-stripping cotton card.

CATHOLIC COUNCILS IN BALTIMORE.

Thirteen grand councils of bishops have been held at the Cathedral, in Baltimore, of which, ten were "Provincial" and three "Plenary." The former are always attended by the bishops of a province; the latter by the entire hierarchy of the United States.

First Provincial Council, October 1, 1829, under Archbishop Whitfield's direction.

Second, October, 1833, under the same Archbishop.

Third. May, 1837, under Archbishop Eccleston.

Fourth, May, 1840, under same Archbishop.

Fifth, May, 1843. under same Archbishop.

Sixth. May, 1846, under same Archbishop.

Seventh. May, 1849, under same Archbishop.

Eighth, May, 1855, under the direction of Archbishop Kenrick.

Ninth, May, 1858, under same Archbishop.

Tenth, May, 1869, under the direction of Archbishop Spalding.

First Plenary Council. May, 1849, under the direction of

Archbishop Eccleston.

Second, October, 1866, under the direction of Archbishop Spalding.

Third, November, 1884, under the direction of Archbishop

Gibbons.

Cotton duck was first used for the sails of vessels in this city. It was manufactured at the mills of C. Crook Jr., & Bro., erected in 1810. The first vessels fitted with sails from these mills, were the property of Isaac McKim, one of Baltimore's enterprising merchants.

The first oil-cloth works in this country were established in 1820, on High street near Baltimore. They were afterwards located at the corner of Pratt street and Broadway, and were

afterwards destroyed by fire in 1850.

The first tower in this country for the manufacture of dropshot, was built in Baltimore. There were three of them—one on Gay street, next to the German Church, erected in 1822, and taken down in 1844; one at the corner of Fayette and Front streets, built in 1828, and still standing, the corner stone of which was laid by Charles Carroll of Carrollton; and one on Entaw street, between Camden and Conway, which was taken down when Camden Station was built.

Steam was first used for cooking and heating purposes in this country, in Baltimore, by C. W. Bentley, about 1837.

The first adamantine candles were made in this city in 1841, at the Adamantine Candle Works of Hancock & Mann, at Canton.







